Presidential Address

ON

A PLEA FOR GRADUATION IN LARYNGO-OTOLOGY ON A BROAD BASIS.

DELIVERED BEFORE THE SECTION OF LARYNGOLOGY OF THE ROYAL SOCIETY OF MEDICINE.

BY

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Ω ἀνεξέταστος βίος οὐ βιωτὸς.
(Life without examination is not worth living.)
Plato.

COMING from Bristol, where, as you are aware, we have recently developed a university, my thoughts have perforce been turned in the direction of educational matters, and as a lecturer on diseases of the nose, throat, and ear, I have given much consideration to the position of our own speciality in medical education, which, in the interests of practitioners and of patients, leaves something to be desired.

We hear it said that this is a day of specialism, and specialism in medicine and surgery is thought to be a modern development. Yet we learn from the Ebers papyrus that in the thirteenth century B.C. patients applying for relief to the medical temple at Thebes had to state their complaint, and that it was left to the principal of the medical staff to send the specialist best suited for the case. We find that the practice of surgery was distinguished from medicine even earlier than the thirteenth century B.C., and it is recorded that in Egypt each physician treated a single disorder and no more, some devoting themselves to the eye, others to the teeth (they made artificial teeth, and some have asserted that they have found traces of gold stoppings in the mummies), and others again devoted themselves to disorders of the intestines, while yet others were obstetric physicians called in by midwives to the difficult cases.

In our own land, when in 1460–61 a charter was granted to the Barber-Surgeons, and the Edinburgh Charter was obtained in 1505, surgery in a humble way started on its career divorced from medicine, and under the paternal fostering of the Colleges of Surgeons became a science and art distinct from internal medicine.

We find in consequence that in Great Britain, and later also in Ireland, the field of medical science was long occupied by rival schools of medicine and of surgery. Hence arose our academic distinction between medicine and surgery peculiar to this country, for in practically every European nation except our own a certain course of study is laid down, and for all practitioners alike State examinations must be passed. If a degree is obtained it is always that of Doctor of Medicine—there is no distinct qualification in surgery; and it is the same in Canada and the United States. Thus, after qualifying on a common basis, the graduate is free to follow his own bent; and if he seeks to become a pure physician, surgeon, or specialist, he must establish himself as such, not by passing further examinations, but by his clinical and research work. Thus while the degree of M.D. serves for all physicians, surgeons, and specialists alike, their subsequent differentiation is clinical, and not academical as with us.

We alone carry examinations quite beyond the qualifying stage to the higher standards of medicine and surgery, and he who aspires to the charge of a teaching clinic and consulting practice must, as a rule, first obtain a higher and special qualification in medicine or in surgery respectively, involving a further and more advanced course of study. Though not without drawbacks, this has the advantage of ensuring that the more highly qualified physician or surgeon has received, over and above what is necessary for qualification, a very thorough grounding in current medical or surgical science and all that immediately pertains to it, and the custom has coincided with an increasingly high standard of original medical and surgical work in this country. The plan has answered so long as the whole range of medicine on the one hand or of surgery on the other could be mastered by one individual, but with advancing knowledge, pure medicine and surgery are no longer the only specialities, and with the growth and development of newer special branches the objections to our English system appear. Either we must continue our unfortunate custom of mentally placing each speciality under the category of medicine or of surgery, and of demanding as the *sine quâ non* for teaching clinics the corresponding medical or surgical qualification, although it may have no special bearing whatever on the specialities in question—in my own hospital both the laryngologist and the obstetrician of the future are distinguished in that they will have to possess all the higher qualifications both of the physicians and of the surgeons—or we must be consistent, and offer opportunities for a qualified practitioner taking his higher qualification in his speciality after a course of post-graduate study and practice *parallel* to that required for the physician or the general surgeon.

No one could be more opposed to too early or too narrow specialization than I am, for it is certain that a sound upbringing in the whole range of general medicine and surgery is the only safe foundation for any special branch. But the tendency is to make another speciality, general surgery, the academic test of fitness in laryngology; medicine, and even a systematic training in our own department are made secondary considerations, with a consequent danger of our becoming too exclusively surgical. In no other speciality would this be more deplorable than our own, for which I believe general practice is as good taking-off ground as pure surgery. We want contributions from all points of view, and it should always be open to every practitioner to specialize in any direction according to his opportunities for so doing.

To our fellow countryman, Robert Liston, belongs the honour of publishing, in 1837, directions for laryngoscopy, which he recommended to be employed for observing diseases in the larynx.* Eighteen years later Manuel Garcia published his epoch-making observations, to be followed by those early giants in our speciality, Türck and Czermak, while so many of those who are here to-day have had the privilege of personal acquaintance with the slightly later but hardly less distinguished pioneers, when laryngology was still in its infancy, and many members of this section have not only witnessed, but have generously contributed to its exceedingly rapid growth and development. Indeed, most of us have had to acquire our knowledge to a large extent first hand, and it has not always been easy to keep so thoroughly in touch with the rapid advances all the world over.

But things are very different from what they were when I started practice, and hardly any individual is capable of a complete mastery of the whole range of rhino-laryngology; and if otology be superadded the ground is so extensive that, without devoting his whole time and attention to those subjects over several years, no one can hope to be a scientific expert throughout such a large territory.

It is no small matter to acquire an accurate knowledge of anatomy, pathology, and, in so far as they bear on the diseases of the nose, throat, and ear, of neurology and general medicine, the etiology, diagnosis, and treatment of diseases of these, together with a fair acquaintance with the various methods of treatment and operations which have been or are employed, as well as the acquirement of the operative and diagnostic technique, including the trachea and oesophagus; for it is to the honour of our speciality that our laryngological colleagues abroad—where the development of specialities has been better fostered—have originated and made practical tracheoscopy, bronchoscopy, and oesophagoscopy.

I think no one who is not ignorant of the work that is being done by laryngologists and otologists can deny that, *as an addition* to that sound general education in the principles of medicine and surgery for pass qualifications,

* Liston: *Practical Surgery*, London, 1837. The following reference is on page 350: "The existence of this swelling can often be ascertained by careful examination with the finger, and by means of a speculum; by such a glass as is used by dentists on a long stalk, previously dipped in hot water, introduced with its reflecting surface downwards, and carried well back into the fauces, a view may often be had of the parts."

all this involves as much, if not more, study as is demanded of those who present themselves for a Fellowship of the Royal Colleges of Surgeons or a Mastership of Surgery at a university, or an M.D. in obstetric medicine, in State medicine or in pathology, or an M.S. in dental surgery.

All these degrees in special branches may be acquired at the London University, and I sincerely hope that on similar lines a graduate may ere long be able to take a higher degree in our speciality. Surely the practitioner who so qualified himself for work in laryngo-otology should have the opportunity of being tested by examination and of obtaining his higher degree in this department. He would be better equipped for making the utmost use of his riper clinical experience than by devoting himself instead to acquiring an exact knowledge of the anatomy of the whole body and the whole range of advanced medicine or general surgery, *at the expense of* systematic liberal study of his speciality and all that pertains to it. To test such study by examination too late in life would be a misfortune.

Nowadays one might suppose Plato's maxim read "Life without examinations is not worth living"! for already the tendency in this country is to continue medical examinations unduly, and thus to trench too far on the precious years of early adult life, when a man's best original ideas are germinating and should be cherished and allowed spontaneous growth, instead of being trammelled and choked out of life by scientific pedagogy.

We gather fruits in autumn, but life's spring is the sowing time. It is worse than useless to spend too long a time in tilling and preparing the ground, and still worse to disturb the roots by examination when we should be looking for the blossoms of research. There is more truth in the world-renowned Oslerism than is generally suspected, and, particularly in the field of science, it is an open question whether after the age of 40 one's mind ever breaks new ground in the sense of being original.

An Address

ON

SOME POINTS IN THE DIAGNOSIS AND LOCALIZATION OF INTRACRANIAL TUMOURS.*

BY

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DR. RISIEN RUSSELL said the problem as to whether tumour or functional affection of the nervous system was to be held responsible for certain cephalic and other symptoms that might occur had first to be dealt with. It would have been possible for him to quote cases in which hysteria and tumour had been confounded, and in which patients had been trephined for the organic condition when hysteria accounted for the clinical picture, but as his time was limited he preferred to deal with the cases in which difficulties arose in the diagnosis between neurasthenia and tumour, for this problem was becoming more and more common owing to the rapid increase of neurasthenia in the community. He could have quoted many cases in which the question that he had been asked to decide was whether tumour existed when, in reality, neurasthenia was alone responsible for the symptoms, but he thought it more instructive to refer to two in which neurasthenia was supposed to account for symptoms which were due to tumour. In one of those cases the patient died without revealing any of the positive signs by which tumour could have been recognized, while in the other the absence of organic signs allowed the patient to be sent for a voyage from which he returned with unmistakable indications of tumour which proved rapidly fatal.

After dealing with the physical signs on which reliance must be placed for the diagnosis of tumour, he referred to a case in which the symptoms ultimately proved to be due to neurasthenia, but in which he had to reserve his diagnosis for some time, owing to the fact that the optic discs were rather high coloured and one plantar reflex, though not by any means extensor in type, was not as definitely flexor as the other. There were certain physical signs that could not possibly exist in the absence of organic disease, but, nevertheless, he from time to time met medical men who allowed their knowledge of the patient's hysterical tendencies or a neurotic family history to outweigh this evidence in a way that was wholly unjustified. What he had said about neurasthenia would prepare his audience for what was to follow in regard to general paralysis of the insane, for it was no uncommon thing for this grave disease to be met with when the symptoms had appeared to be adequately accounted for by neurasthenia. To those who expected grandiose delusions and other characteristic signs of madness this would seem absurd, but he must remind them that general paralysis revealed itself in the earlier stages in many different ways, and that the diagnosis had constantly to be made in the absence of grandiose delusions or any other obvious signs of madness.

He had met with more cases in which tumour was suspected where general paralysis accounted for the symptoms, but he was also familiar with the other class of case in which tumour accounted for what was supposed to be due to general paralysis. In calling attention to the physical signs that should be relied on in differential diagnosis, he referred to the value of lumbar puncture and the Wassermann test, and directed attention to a paper by Dr. Grainger Stewart in *Brain*, in which he had brought out the points that favour the diagnosis of a frontal tumour of the brain, a variety that was especially liable to be confounded with general paralysis.

He next discussed cases in which vascular disease occasioned a clinical picture which caused tumour to be suspected, and pointed out that although under ordinary circumstances vascular lesions of the brain resulted in the sudden or rapid appearance of symptoms, exceptions occurred in which the progress of symptoms was so slow as to justify the suspicion of tumour. Two classes of cases were met with in this connexion, one in which there were general symptoms of intracranial disease without paralysis, and the other in which hemiplegia of slow onset formed part of the clinical picture. Two cases were quoted in which there had been great uncertainty in his mind as to the correct diagnosis. In one he suspected tumour where the subsequent course of the case justified the view that vascular disease accounted for the symptoms; in the other, after much hesitation as to the correct diagnosis, the patient was trephined, a procedure that proved to be fully justified by the increase of intracranial pressure revealed at the operation, and by the subsequent course of the case. In considering the evidence on which differential diagnosis must rest, emphasis was, of course, laid on the state of the vascular system and kidneys, but, unfortunately, the vascular system was not above suspicion in some cases of tumour, and moreover, vascular lesions might complicate tumours in a manner that might readily lead to errors in diagnosis.

It was impossible to discuss these vascular cases in relation to tumour without being reminded of the confusion that might arise between them and aural vertigo, and between the latter affection and intracranial tumour. The cerebellum was naturally the supposed seat of the tumour that was suspected in the instances that he had experienced, so that attention was called to the indications that would favour the graver diagnosis of cerebellar tumour. Dr. Risien Russell took the opportunity of referring to a difficult case in which tumour of the cerebellum had been diagnosed; in this diagnosis he had not been able to concur. Nevertheless, aural vertigo could not account for all that was present. In a younger subject this class of case might well pass for an anomalous case of disseminated sclerosis, but in a person at the patient's more advanced age it was more likely to be due to vascular disease and its consequences.

Time did not allow him to deal with migraine in the way that he had hoped would be possible, but he could not pass over this subject without referring to the special liability there might be of confounding the variety known as *migraine ophthalmoplégique* with intracranial tumour,

* The annual address at the Department of Pathology of the Oxford Medical Society, November 11th, 1910.

owing to the oculo-motor paralysis which accompanied the headache. The recovery from the paralysis which was to be expected in the earlier attacks had been responsible for an error in diagnosis on his part in a case in which a patient died of intracranial tumour who was supposed to be suffering from this variety of migraine, owing to the remarkable improvement without antisyphilitic treatment which took place in the ocular paralysis accompanying the headache. There was no optic neuritis or any other organic sign except the ocular paralysis on which the diagnosis of tumour could be based.

To those familiar with the ordinary classical picture of disseminated sclerosis it must seem a little far-fetched that this affection, so largely spinal, should be capable of being mistaken for tumour of the brain. Nevertheless, such confusion did occur, and he could recall many instances in which errors had been made, and even some in which patients had been sent into hospital in the hope of operation for cerebellar tumour when, in reality, disseminated sclerosis existed. Two typical cases of this kind were quoted, in one of which the extraordinary unilaterality of the signs and the absence of sensory defect and sphincter disturbance fully justified the suspicions of tumour at first entertained and subsequently abandoned by the medical man under whose care the patient had been. A third case was quoted in illustration of the opposite state of things, in which disseminated sclerosis was suspected where tumour obtained. Emphasis was laid on the presence of optic neuritis and the absence of indications of involvement of the pyramidal tracts as in favour of cerebellar tumour, in addition to what had already been said in regard to sensory defect and affection of the sphincters.

Time only allowed of brief reference to a few points in regard to difficulties that might arise in localization; but he referred his audience to an important paper by Dr. James Collier on this subject. A wrong conclusion might be arrived at owing to the case coming under observation late when possibly sufficient weight was not given to the significance of the earlier manifestions. How readily mistakes could occur was illustrated by a case in which all the indications save one pointed to the cerebellum as the probable seat of the tumour, but the presence of hemianopia resulted in trephining over the correct position, namely, the occipital lobe. Concomitant vascular lesions might, however, complicate matters, and lead to errors in localization. It was impossible to overrate the value of every physical sign that could be determined in these cases, so that he was glad to have the opportunity of calling attention to a point brought forward by Dr. Farquhar Buzzard at a discussion in the Ophthalmological Section of the recent meeting of the British Medical Association in London. He had found that loss of the pupil reflex to light justified the conclusion that the tumour was deep-seated, and was notably met with in those which involved the third ventricle. Attention to such details was most important, in view of the possibility of relief by operation, for while decompression might give considerable relief in deep-seated tumours, the attempt to remove such growths could lead to no good result. How important it was to give strict attention to what might possibly be regarded as insignificant details was illustrated by a case in which defect of upward movement of the eyes and a few other manifestations so well set out by Dr. Gordon Holmes as part of the symptom-complex that was produced by mesencephalic tumours, enabled him to arrive at a correct diagnosis, but in which, in opposition to his view, the patient was operated on for supposed tumour of the cerebellum, with fatal result.

THE value of the estate left by the late Dr. Sydney Ringer, Emeritus Professor of Medicine at University College, has been sworn at £54,287.

THE autumn dinner of the Southern Branch of the Durham University Medical Graduates' Association was held on December 2nd, at the Criterion Restaurant, when many members and guests were present. The Vice-President of the Association, Dr. J. Inglis Parsons, occupied the chair. The toast of the University and Association, proposed by Sir W. H. Allchin, was acknowledged by Dr. Wm. Rawes, and that of the visitors by Mr. Charters Symonds. Dr. W. Davis made a delightful speech in proposing the vice-president's health. Excellent music was provided by Mr. John W. Trimey.

A Lecture

ON

THE TREATMENT OF GASTRIC AND DUODENAL ULCER.

DELIVERED AT THE MEDICAL GRADUATES' COLLEGE, OCTOBER 10TH, 1910.

BY

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TREATMENT of ulceration of the stomach and duodenum is, except in a prophylactic sense, of course in no way concerned with treatment of such results of ulceration as perforation, stenosis, visceral deformity, abscess, etc. The treatment of these is strictly surgical, a standing witness to unconfessed failure to cure the ulcerative lesion which gives rise to them. Happily, not all of such tokens of failure are often seen, though ulceration itself of duodenum or stomach, whether acute or chronic, is a much commoner event than is frequently supposed. Ulcer of the stomach demands practically the same treatment as does that of the duodenum. We have therefore only to consider the treatment of acute and chronic ulceration itself, and of its two most frequent accompaniments, haemorrhage and pain, when not due to adhesions or other results of ulceration.

Until comparatively recent years the treatment of gastric and duodenal ulcer, both acute and chronic, has been entirely medical. Medical treatment, until towards the end of last century, may be summed up in the word "rest and starvation," both for acute ulcers and for chronic. All gradations in rest and starvation were observed, according to the needs of the individual case, from absolute rest for many weeks or months with the merest pittance of food administered by the bowel, to less restricted movement and the administration by the mouth of nutriment mainly of a liquid nature. As improvement set in, as it often did, a gradual return to active life and more satisfying diet was allowed, and the seal of professional approval was set on an almost universal practice. To a large extent the same method of treatment, and the same satisfaction with the results obtained, prevail to-day. Gradually, however, especially on the Continent, it began to be seen that confidence in the time-honoured method of treatment by rest and starvation for all cases alike was seriously misplaced. Not only did many cases fail to respond to the treatment, but others considered as cured were found, either during life or on autopsy, not to have been cured; or, again, cases in which temporary cure was apparently an actual fact repeatedly relapsed. In consequence it came to be realized, though by no means generally, that starvation was not essential to the production of cure, and that the small nutrient enemata, measured in ounces, previously given could be safely replaced by nutrient rectal injections measured in pints. The food-absorptive power of the large bowel was, however, much over-estimated, and the results were not materially improved. Tentatively then experiment was made of increasing the amount of food by the mouth, and it was found, chiefly by Lenhartz, that food could safely be given in larger quantities, and of higher nutritive value, than had previously been held wise or safe. The Lenhartz treatment was widely tried, and, though the results *qua* cure are not strikingly superior to those of the older method, the treatment had a great educational value in demonstrating how dangerous and unnecessary the starvation inseparable from rectal feeding is. He also unquestionably proved that feeding by the mouth in all but the most urgent cases is not necessarily fraught with risk. In spite, however, of his teaching, and to some extent because of it, even those who grasped the importance of avoiding starvation in the treatment of these cases continued and still continue, when administering food by the mouth, to adhere to the custom of giving it mainly in liquid form. This they do quite regardless of the unscientific nature of such a proceeding, a statement which I shall presently justify. About the time that the

medical world was beginning to appreciate the fact that rest, starvation or semi-starvation, and slops was not the ideal treatment for all cases of ulcer, their surgical *confrères* began to claim the stomach and duodenum as their own. They soon were able to show, pre-eminently the Mayo brothers in America, and Moynihan in England, that by excision, or for choice by short-circuiting, with or without simultaneous obliteration of the pyloric orifice, brilliant results could in many cases be obtained, expressed in total relief of symptoms and relative permanence of cure. This not unnaturally gave place to increased confidence, followed by the somewhat rash assertion that, for chronic duodenal cases at least, operation was the only rational treatment once diagnosis was sure. The position, therefore, to-day is that whilst in some quarters medical treatment by rest and starvation is giving place to rest and semi-starvation, in others both are giving way to the somewhat insistent claims of modern surgery.

Whilst, however, conceding fully the undoubted fact that rest and starvation, or semi-starvation and slops, cure many cases, even permanently, of gastric and duodenal ulcer, and whilst conceding fully the wonderful results achieved by surgeons, both as regards immediate relief and apparent permanence in numerous instances, the attitude of the profession, both medical and surgical, is based, in my belief, on three grave fallacies:

The *first fallacy* is concerned with the question of rest. It is generally believed and taught that complete rest in bed, when coupled with deprivation of food by the mouth, necessarily involves complete rest of the stomach and duodenum, expressed in absence of visceral movement and secretion. This belief has little solid foundation of fact. The injection of food into the bowel is always apt to start gastric movement and gastric secretion, as has been amply proved. So also will the sight or even the thought of food. Not only so, but it appears from recent experiment by Dr. P. O. Shirokieh that the stomach is never motionless for long, even when completely empty. There is again some evidence to show that secretion of the digestive juices is not necessarily restricted to the times of intake of food even in absence of psychic stimulus. If this be true, it is clearly impossible to secure absolute visceral rest, though restriction of general movement and of food supply must certainly assist. Passing of hyperacid secretion over the pylorus is also, as we know, productive of contraction of the gastric wall. It is, of course, not suggested that some beneficial restriction of movement and secretion cannot be induced by appropriate means. But it has become the custom for many writers to assert that they are able by rest in bed and deprivation of food to immobilize the stomach as one would speak of immobilizing a limb. It is therefore necessary to call attention to the fact that such immobility is largely imaginary.

The *second fallacy* is concerned with the administration of liquid food. It is believed that if food is to be given by the mouth in these cases of ulcer it should be given in liquid or in semi-liquid form. This is not good practice, partly because an ulcer that will not heal, such as the chronic form of lesion, will not the more readily do so if its floor and edges are constantly being soaked and steeped by an infected decomposing medium charged with fatty organic acids and the products of fermentation. That such is a common state of the gastric contents in cases of chronic ulcer numberless analyses show. One of the reasons for infection and decomposition is the gastric stasis that is almost the rule in long-standing cases of ulcer, and very frequently in cases with a shorter history. The gastrostasis is the result of gastrectasis, itself the expression either of stenosis or, more generally, of toxaemic atony. To add meals in a fluid or semi-fluid state to a stomach already heavily laden, as is often the case, with many ounces, or even pints, of unescaped relics of previous meals, is the best possible method of retarding healing. For not only is the ulcer itself liable to infection and the formation of healthy granulations to serious inhibition, but from the constant hyperevolution of gas incessant movement of gastric and duodenal walls is excited and repair made doubly difficult. Add to this the profound interference with general nutrition by the contamination of each succeeding meal by the undischarged remains of many last meals, and we are led to wonder how, under these conditions, healing can ever take place. For if general nutrition be impaired the power of local healing must be seriously hampered, quite apart from the obstruction to healing due to the rigid barrier that so frequently exists between the floor and sides of a long-standing lesion and the vivifying influence of a well-fed lymph stream.

The *third fallacy* is one that seriously affects the position of both physicians and surgeons alike so long as they regard treatment of the ulcer equivalent to treatment of the cause of ulcer. The whole question, indeed, of the permanent value of any method of treatment of gastric and duodenal ulcer turns on this: Is the ulcer that you wish to cure a disease in itself, or is it merely the local sign of a general dyscrasia whose very existence you have never suspected? If "simple" ulcer, with its attendant miseries of pain and haemorrhage, be a disease *sui generis*, as has been taught for so long, we can never attain to unanimity of opinion as to what, taking the cases as a class, is the ideal method of treatment to adopt, and the present state of chaos and uncertainty must always continue. For, so far, whatever be the method followed, even in the early stages, success is only spasmodic, and relapses and failures form a high percentage which is daily being added to even from the clinics of the most successful exponents of modern surgery. If, on the other hand, gastric and duodenal ulcer, with attendant pain and haemorrhage, are merely local symptoms of a general dyscrasia characterized by the recurrent appearance in the blood of toxins with a specific cytolytic affinity for gastric and duodenal tissues, how different the problem of treatment becomes! If the gastrolytic theory of the production of haemorrhage and of ulcer which I have elsewhere fully elaborated, and in support of which there is much indirect evidence, be sound, it becomes essential to reconsider our position. For, on the one hand, it becomes increasingly clear that to be content with such purely local measures as the administration of antacids, alterations of the secretions by administration of oils, and futile attempts to secure complete local rest by restriction of movement and homoeopathic administration of food, when the general diathetic condition is clamouring for aid, is to court eventual failure. On the other hand, to expect to secure universal immunity from present and recurring ulcer by any devices of the knife becomes clearly equivalent to expecting to cure syphilis by excision of a gummatous tumour, and equally liable to disaster. This third fallacy, then, of mistaking a mere symptom for the disease is fundamental, and its importance cannot be overestimated if we desire real advance.

As a result of holding these views on the pathogenesis and treatment of gastric and duodenal ulcer, I devised the serum and dry protein treatment some three years ago. The results have been so good as regards temporary relief of all symptoms in the large majority of cases treated that one is encouraged to believe that the *rationale* of the treatment is based on sound lines. No kind of finality is claimed at present, as a considerable number of years should be allowed to elapse before making any definite statement as to permanency of results. I have treated personally or by correspondence in this time a large number of cases, gastric and duodenal, mainly in the chronic stage, and can confidently assert that the results abundantly justify one in encouraging other workers in this field to extend observations on the same lines. My intention here is briefly to outline the main points of the treatment, postponing tabulation and full consideration of all the cases treated till one can speak more definitely on the question of permanency of results than is at present possible. I should like to point out that every one of the chronic cases on which this lecture is based were derelicts of other methods of treatment—that is to say, were failures of other methods. Hence the test was in each case a most severe one. Not only so, but the majority of the cases were private ones—that is, had never received hospital treatment. Now in all hospital cases it is a familiar experience that the transition from bad food, or improper food, or too scanty food, is often followed by excellent immediate results whatever be the method of treatment adopted. This simple fact at once destroys the value of all statistics relating to the advantages or the reverse of any one method of medical treatment adopted in hospitals as regards this particular affection. To my cases, however, this objection does not apply, as, since most were private cases, and the larger number of them chronic cases that had repeatedly undergone treatment of

various kinds, there was no such transition from grossly improper food to the dietary I prescribed.

For convenience of description the treatment of ulceration can be dealt with under four headings:

Group I.

(*a*) Chronic cases who have never had haemorrhage or only slight haemorrhage.

(*b*) Chronic cases who have had haemorrhage, sometimes perhaps severe, but who, when coming for treatment, are suffering from varying degrees of haemorrhage, but which is never severe.

Group II.

(*c*) Chronic cases exhibiting at the time of treatment acute exacerbations, haemorrhagic or other.

(*d*) Acute cases with alarming haemorrhage or other grave symptoms.

In my hands the first two classes of case receive the same kind of treatment. They can therefore be considered in one group. The last two classes of case also receive one form of treatment; they can also be considered in one group.

GROUP I.

Chronic cases not suffering from haemorrhage, or suffering from haemorrhage that is not severe. In cases of this group particular attention is paid to the following details:

A.—*Condition of the Mouth and Teeth.*

Until the mouth has been passed as free from any focus of infection by a reliable dentist all treatment is, if possible, postponed. It is amazing to find in what a large percentage of cases, in which gastric pain and haemorrhage occur, marked pyorrhoea or dental caries exists.

B.—*Condition of the Bowels.*

Whether constipation is present or not a purgative pill is administered, in most cases every night for at least a fortnight. The reason for this is that one frequently finds in these cases that the slightest degree of constipation appears to increase congestion of the whole tract, showing itself in increased pain. Also a considerable amount of constipation is sometimes present without being in the least suspected, even in patients who make positive statements to the contrary. The point can be proved by comparing the bulk and weight of the dejecta for a few days after mild but continuous purgation with that before the beginning of treatment. The results are sometimes astonishing, even in patients who deny constipation.

C.—*Fluid Intake.*

Tea, coffee, wine, spirits, liqueurs, are rigidly forbidden. Soups, broths, beef-teas, and, in most cases, milk in any form, are also excluded. The number of patients who have found from long experience that milk aggravates the pain due to ulcer has been to me in these cases a revelation. Sometimes the converse is found, but comparatively seldom. It must be remembered that nearly all statements, based on hospital experience, with regard to the value of milk and other liquid food for all chronic cases of ulcer alike are worthless. This is so because a patient with a chronic ulcer who has been on an improper diet previous to admission into hospital will almost certainly experience relief of pain when put on a milk diet after admission. In many private cases put on milk the same treatment has been previously given. In such cases milk very rarely relieves the pain, because there has been no such transition from grossly improper diet as obtains in hospital cases after admission.

D.—*Rest.*

In the group of cases under consideration absolute rest in bed for more than a few days is seldom necessary or desirable, if the other points in the treatment are adhered to. One's object in these cases is to improve general nutrition as rapidly as possible, in order to give local repair its maximum chance. This ideal is apt to be seriously compromised by prolonged rest, which impairs appetite and usually involves relative curtailment of air supply. In the majority of cases treated ten days or a fortnight's rest in bed is all that is necessary, which is then followed by the use of a chaise-longue, for preference in the open air, for another fortnight; the idea being that if the disease has a toxaemic basis abundant supply of fresh air is of great importance. The degree and extent of rest must, of course, in all cases be adapted to individual needs, and is best gauged by the time of disappearance of pain. In many instances pain has materially lessened in a week or even less, and has completely disappeared in a month. After this time, if all be well, a gradual return to active life is allowed, the transition period occupying another two or three weeks. In many cases the time consumed in inaction can be very materially shortened, so that no hard-and-fast rules can be laid down. You will notice that I offer no suggestions as to the length of time required for the healing of acute or chronic ulcer in man. The fact is we do not know. Observations on acute experimental ulcer in animals do not help us.

E.—*Diet.*

In these chronic cases in which haemorrhage is either absent or in which, if present, it is not of an alarming nature, the following articles of food I have found necessary to veto: Bread, potatoes, vegetables, milk, or farinaceous puddings of sago, rice, tapioca, etc., cheese, as well as other articles more obviously inappropriate. The avoidance of milk itself as a food, and of soups, broths, etc., and of the custom of drinking with meals has been already insisted on. Such veto is based on the impropriety of introducing into a stomach that is often dilated, with a corresponding degree of stasis of gastric contents undergoing fermentation, material that aids stasis and fermentation, such as, in particular, starchy and milky food. The avoidance of stasis of the gastric contents in cases of ulcer is of the utmost importance. It has been asserted that liquid food leaves the stomach in cases of ulcer in man sooner than does meat food in purée form. The only evidence so far offered in support of this statement is based on experiments on animals. Unless, however, the animals selected for experiment be habitually carnivorous and have atonic or dilated stomachs this evidence is of no value, quite apart from the fact that experimental ulcers can so far only be produced in animals under absolutely artificial conditions. Clinical experience in this matter far outweighs observations from the laboratory. Most cases of chronic ulcer exhibit some degree of stasis of gastric contents which repeated observation shows to be decreased by dry diet, and increased by food in liquid form. No doubt the improved nutrition induced by meat involves improvement in the tone of gastric muscle that is unattainable by milky or starchy foods. The object of the following list of foodstuffs that I have found to give the best results is twofold—first, to give mainly protein food in solid form which will saturate the digestive secretions which are often, in cases of ulcer, not only hyperacid but hyperpeptic; secondly, to give the food in as small a bulk as possible, consistent with high nutritive value. The object of the diet is, in short, to avoid stasis, fermentation, flatulence, to promote rapid and easy digestion, and to relieve pain. Finally, to treat not the ulcer by administration of carbonates, bismuth, etc., but to treat the condition which gives rise to ulcer. In practice the important practical point emerges that as the general condition improves, so does the local in the majority of cases. Cases that do not improve, owing to the lesion being cut off from the lymph stream by thickening of floor and sides of the ulcer sufficiently to make cure impossible by these means, are best turned over to the surgeon. All the objects of the diet mentioned can be attained by giving dry meals, mainly of meat, and by never allowing the stomach to go many hours without food. I am now frequently asked by medical men to draw up elaborate diet tables suitable for all cases. This is not necessary or desirable, because once the principles of the treatment are grasped it is far better that each diet sheet should be drawn up to suit the needs of each individual treated. Moreover, there can be little real value in a treatment that is not sufficiently elastic to be moulded to individual peculiarities by the personal attention of the individual practitioner. A fair sample of a suitable diet table will, however, perhaps be of service as a model. At 1 p.m. and 7 p.m., beef, mutton, or lamb, either as joint, steak, chop, cutlet, etc., lightly cooked but not raw, fresh, tender, and served in fresh gravy, without vegetables. This should be the entire meal, except for toast or one or two rusks, if preferred, with butter. In hospital practice it is not easy to obtain the personal attention to these details that is essential to success. In order, therefore, to satisfy oneself as to the value of a meat dietary cases of private patients offer better material for study. The amount allowed should be regulated only by the appetite

of the patient. If eaten slowly, and if all the points mentioned are adhered to, the more a patient can eat of this food the sooner will his pain disappear, as well as all other symptoms. In a recent paper by Dr. C. Bolton—who is responsible for some most important work on the pathology of acute gastric ulcer in animals—it is stated that "when the process of gastric ulceration (in the cat) is going on, one point in the treatment of such a case is obviously to stop the flow of gastric juice, not to encourage it by giving a diet such as recommended by Lenhartz." This observation well illustrates the difficulty of attempting to express laboratory results in clinical terms. For not only does deprivation of food not necessarily inhibit entirely gastric secretion and movement, but the absence of albuminous substrate eager for saturation by digestive juices effectively excludes gastric mucosa from the protection which it would otherwise receive. It also entirely ignores the supreme importance of improving general and local nutrition by adequate food supply. As a matter of fact, if we were able to inhibit entirely movement and the secretion of gastric juice in these cases, we should be doing our patients great disservice by making it impossible to ensure efficient nutrition. For breakfast—toast, butter, and eggs lightly cooked; for tea the same, with, if necessary, a little hot water to drink. At 11 a.m. 2 oz. to 3 oz. of raw beef-juice freshly made, and again at 9 p.m. During the night, if disturbed by pain, small sandwiches made of stale bread containing freshly pounded chicken or game may be given, also fresh. During the first week of treatment this dietary is gradually worked up to. Once established it should be continued for at least a month after the ordinary occupation has been resumed. In this group of cases there are, of course, some on the borderland of the second group which may at any moment—from increase in haemorrhage, etc.—merge into the second group. The dietary appropriate to these cases will be considered under that heading.

F.—*Serum.*

The chief value of the oral administration of a normal serum, whether of man, horse, sheep, or ox, is, in these cases, a local one. Its action in enabling an ulcer to heal is both direct and indirect. Indirectly it is of value on account of the power possessed by mammalian serums to disinfect an ulcer and to check its advance by virtue of the antiferment activities that all such serums possess. In this way obstruction to healing is to a large extent removed. The action of a normal serum in these respects can be readily studied after applying to a superficial ulcer, sinus, or fistula, sterile gauze soaked in, for example, normal horse serum, as I have frequently shown. If, for instance, such dressing be applied to the floor and walls of an old-standing ulcer or fistula soaked in purulent discharge, the eroding activity of cytolytic enzymes from bacteria, broken-down leucocytes and other cells can often be very rapidly arrested—so much so that lesions which are easily open to inspection, such as large superficial ulcers of the arm or leg, may be seen to clear up in a most striking manner, with total arrest of suppuration. This is due to the restraining power that normal serum has on the lytic activity of enzymes acting on proteins, fats, etc., in virtue of its antitryptic, antipeptic, and antilipolytic functions. There can be little doubt that gastric and duodenal ulcers which, whilst open, are constantly being bathed in secretions laden with trypsin and other ferments set free from disintegrated leucocytes, tissue cells, and from bacteria, owe in large measure their continued patency to the action of these ferments as well as to the pepsin and trypsin of the secreted digestive juices. The administration by the mouth, then, of a serum strong to inhibit such action has certainly a rational basis, which also explains to a great extent the excellent results that can be obtained in superficial lesions that refuse to heal by adopting any of Bier's methods of artificial hyperaemia. Auto-serum therapy, properly so-called, owes, in fact, much of its value, as I pointed out in 1908, to the calling up from the lymph stream of antiferment reinforcement locally so much in demand. In addition to the indirect power of normal serums in aiding healing is the marked direct stimulating effect that a serum that is atoxic and sterile has on ulcers. This again can be demonstrated on superficial lesions that the eye can control. If serum be applied to an ulcer of the arm, leg, or trunk bathed in pus-laden secretion, and totally innocent of any attempt at granulation, a transformation frequently takes place in a very few hours. Not only may suppuration be arrested, but in many cases healthy pink granulations spring up in a surprisingly rapid manner, even in ulcers that have remained open without showing any attempt at repair for twenty and thirty years. I have observed this fact again and again, and have been at a loss to know to what constituent of the serum to attribute this direct stimulating effect. In view, however, of the recent work of Drs. Macalister and Ross on induced cell proliferation, it may possibly be that globin derivatives in the applied serum are to a large extent responsible for this stimulating action. It is therefore difficult to believe that the stimulation to healing given by the local application of normal serums to superficial lesions does not also apply to gastric and duodenal ulcer, within, of course, obvious limitations.

Quite apart, however, from direct stimulation of healing, and from indirectly aiding in cure of an ulcer by inhibition of septic processes, is the action of the serum after absorption in restraining haemorrhage. Previous to 1907 it had been shown by Emile Weil of Paris that intravenous injections of normal serums were often of great value in haemophilic and purpuric conditions. Early in that year, encouraged by Weil's results, I found that equally good results could be obtained by subcutaneous injection, and even by oral administration, in cases of purpura, though sometimes the serum failed to arrest haemorrhage in this condition. In the same year I extended the antihaemorrhagic properties of normal serums to the treatment of gastric and duodenal haemorrhage, as well as to many other forms of bleeding for which a toxic basis could reasonably be surmised. Since then a very large number of cases of haemorrhage of all kinds has been treated in this way, and, though failure does occur, the results as a whole have been most satisfactory. It was very difficut to control the results by methods of observation other than the purely clinical, particularly so when the serum was given by the mouth. But I found by careful blood counts and haemoglobin estimations before and after oral administration in cases of anaemia, mainly of the chlorotic type, that great improvement in the blood picture followed. It was therefore clear that oral administration of normal serum had a certain value *quâ* absorption, which then cannot be excluded in determining its value in ulceration of the stomach or duodenum, whether haemorrhagic or not. How it acts after absorption it is as yet impossible to say, though it is quite conceivable that it inhibits the action of gastrolytic toxins (and, as regards haemorrhage in particular, of the endotheliolytic toxins) that I postulated as possible causes of ulceration and haemorrhage. Personally I regard this as of much greater importance than any effect which serum may have in accelerating the coagulation time of the blood. However this may be, the fact remains that in these chronic cases of ulcer with or without haemorrhage of moderate severity the serum has a most pronounced action in relieving pain, in arresting haemorrhage, and in directly and indirectly aiding in cure of the ulcer. It has been suggested, not unreasonably, that the good results obtained have been due entirely to the generous diet and other details of the treatment, and not to the serum. This, I think, can hardly be the case, as, apart from the palpable effect of the serum on superficial lesions, I find that when the serum is not made part of the treatment the results are not nearly so good.

With regard to the method of administration, normal serums should in cases of open ulcer never be given to starving patients or on an empty stomach, as troublesome and even serious symptoms may ensue. I generally prescribe serum in chronic cases of gastric or duodenal ulcer in doses of 10 c.cm. three or four times a day, immediately after food, in ½ oz. of cold water. It must be atoxic, as proved by injection into guinea-pigs, and sterile, as shown by the same method or by attempts at culture. It should be stored, if possible, on ice, and is better not preserved by addition even in small quantities of antiseptics, as its antiferment activity is thereby seriously impaired. This I have proved by numerous control observations with the viscosimeter. If kept in a sufficiently cool place its activity is not seriously impaired even after a year by mere keeping. If there is the slightest reason from its appearance to suspect deterioration from autolysis

it should not be used, as otherwise severe gastro-intestinal irritation may be set up. It has happened more than once that a horse when being bled for the purpose of supplying serum has been sufficiently refractory to necessitate the administration of ether. Serum from such an animal retains the smell and taste of ether for many months, and has been known to produce violent vomiting. The serum should be administered for at least a month in all ulcer cases, except the mildest, and then gradually discontinued. If given in the way directed, immediate symptoms of serum disease are of very rare occurrence. Personally I have never seen them. It has, however, happened in 5 cases that I have knowledge of that signs of hypersensitization have appeared, in 4 of which they were ephemeral and of little consequence. The symptoms were those of mild purpura and of eczema. Serum of the sheep gives as good results as horse serum. Human serum can also be used with proper precautions, but its chief use is in serious cases of haemorrhage. Antilytic serum, which was prepared for me by Messrs. Allen and Hanbury two years ago, can be used in the same way, by oral administration, or as normal horse serum; and, in virtue of its increased antitryptic strength, is of great value. It is, of course, normal serum artificially treated. Unfortunately, it has not proved possible to increase materially the antiferment values of the serum of the horse by injection of the appropriate ferment.

GROUP II.

Chronic cases exhibiting acute exacerbations, or acute cases with initial severe haemorrhage.

The treatment of this group of cases is primarily that of severe haemorrhage.

Immediate and absolute rest is, of course, essential. If the bleeding still continues, or recurs to an alarming extent, good results are sometimes obtained by promoting cerebral anaemia by raising the head. This failing to arrest the bleeding in really urgent cases, the rapid but careful passing of a well-oiled tube just past the cardiac orifice with a funnel attached to the distal end, followed by the injection of a few ounces of iced water, is said to be sometimes followed by gratifying results. In all cases showing great disquiet a preliminary hypodermic injection of morphine and atropine is useful. Atropine alone in full hypodermic dose I have more than once found successful when everything else had failed. Ergot by mouth or skin, or adrenalin solution is of no value; calcium salts of less. Amyl nitrite inhalations are sometimes of slight service. Ice-bags on the epigastrium give occupation to the patient's friends, but they do not help the patient, may even greatly increase the pain, and certainly aggravate stasis of the gastric contents. Injections of gelatine may be followed by cessation of bleeding, but are subsequently painful and are not free from risk. Food by the mouth is as a rule out of the question so long as haemorrhage is severe; food by the bowel except for a day or two gives a feeling of false security, and is synonymous with starvation, even if given in large quantities. The injection, repeated if necessary two or three times, at intervals of three hours into a vein, or under the skin of the flank or axilla, of normal horse serum, guaranteed as fit for injection, is of the utmost value. Sometimes it fails. Injections may have to be repeated once or twice for a day or two after the initial day of haemorrhage. As soon as twenty-four hours have elapsed after the bleeding has ceased to be alarming, food by the mouth should be carefully begun. As quickly as possible the way should be then very cautiously felt till the case has been transferred into Group I, when the full treatment suitable thereto is adopted and maintained. Cases that have begun in Group I and have been successfully transferred to Group II naturally require very careful watching, but it is surprising how quickly the severest haemorrhagic cases respond to generous feeding on the lines laid down. The diet suitable for cases whilst still in Group I, when the worst haemorrhage is over, may roughly be outlined as follows, special care being taken to avoid milk and soups:

First Twenty-four Hours.—Every three hours during the day 2 or 3 drachms of freshly made chicken jelly alternating with half the yolk of a lightly boiled egg can be given. Occasionally the jelly increases the pain, in which case half an ounce of fresh raw beef-juice, double the ordinary strength, can be given. Cold water in 1-oz. doses may be given to allay thirst.

Second Twenty-four Hours.—Three or four drachms of pounded chicken may be given after boiling and rubbing through a hair sieve, alternating with raw beef-juice and the whole yolk of a lightly boiled egg, intervals of two and a half hours separating the meals. During the night the interval may be increased to four hours.

Third Twenty-four Hours.—Pounded chicken, pounded meat, and the yolks of eggs can now be given every three hours in rotation, in rather larger quantities. Hot water is now useful in 5 oz. doses if slowly sipped, and if not given within an hour of a meal.

The subsequent dietary must be graduated according to the presence or absence of indications of recurrence of haemorrhage. If this has quite ceased, rapid progress can be made. If it still continues, a day or two longer should be spent in very careful dieting, repeating once, or more often if necessary, injections into the stomach of iced water. During the days or hours in which at any time haemorrhage is a cause of anxiety, free purgation with suitable salts is often necessary and always useful.

Such in sketchiest outline are the views that guide my own practice in the treatment of gastric and duodenal ulcer. If I have taken advantage of the opportunity offered by this lecture of presenting a somewhat unorthodox way of looking at these distressing complaints, I have done so in the hope that you will test for yourselves the truth of the principles involved. In conclusion, let me repeat that this serum and dry protein treatment lays no claim to being more than a stepping-stone to the final attainment of a truly specific treatment of the dyscrasia of which ulceration and haemorrhage are but the local signals. In the meanwhile it is sufficient to accentuate the urgent necessity of fresh efforts to determine the essential meaning of the dyscrasia itself, about which we at present know absolutely nothing, and to remember that it is only in prevention of recurrence that the real merit of any form of treatment of these conditions lies.

AN UNUSUAL CASE OF TOXIC DERMATITIS; WITH REMARKS ON SYMMETRICAL ERUPTIONS.

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THE following details of an unusual case observed by the late Dr. Radcliffe Crocker and myself are worth placing on record:

The patient, a woman aged 54, was first seen by the late Dr. Radcliffe Crocker in January, 1908. The notes he made at that time were as follows (Q. 232): Duration one month. Commenced with redness and swelling of the back of the neck, which soon became worse and extended to other parts of the body. Large patches over shoulders, elbows, back, buttocks, back of thighs, and to some extent on lower limbs. The appearances were as if the epidermis had been raised up by an effusion of fluid, which had subsequently been absorbed, leaving black or otherwise discoloured epidermis still adherent. There was also swelling of left arm. The patches appeared at successive outbreaks, and not all at once, accompanied by much itching and burning. The temperature had been a little over 99° at times. Bowels kept open by aperients. Tongue was very furred.

There was a history of having partaken of a rabbit, which was so bad that the patient did not eat much of it. This was about two weeks before the skin became affected. Under treatment the condition subsided.

Early in June of the same year the patient was admitted to hospital, when she gave the following account of herself: In November a rash of beetroot-red colour made its appearance on the face and neck, which gave rise to great irritation. After a few weeks the rash got better somewhat, but did not entirely disappear, and the superficial layers of the skin began to peel off. The armpits were next attacked by the rash, but after some weeks they got better. Then the knees were involved. In all the parts affected there had been much irritation, and in the later stages shedding of the superficial layer of the skin as well. The upper part of the chest had also been attacked in a similar manner. As the rash disappeared there was a tendency for the parts affected to become brown. About a fortnight before the rash appeared the patient had some rabbit, which was bad. There were no intestinal symptoms after partaking of the rabbit.

Personal History.—Influenza (?) as a child. Very temperate. Menopause ten years previously. No leucorrhoea. Patient has had three children; healthy.

Family History.—Mother died of phthisis. Father also dead, cause unknown. Brothers, four, died young (?). Sisters, two, quite healthy.

Present Condition.—A well-built woman of 54. Pulse 102, regular. Heart apex beat normal. Heart not enlarged. Heart

sounds normal. Pulmonary system: emphysema. Some crepitations at left base. Alimentary: bowels regular, tongue furred. Teeth: most of upper and some lower gone. Abdomen distended, and a large smooth mass felt rising from the pelvis as far as the umbilicus, really due to distended bladder. Pus in urine.

Nervous System.—The patient of hysterical disposition; weeps with small provocation. The cranial nerves are all normal except the sixth; there is nystagmus, right eye only on looking to the left. The upper limbs have good power, and sensation and co-ordination are normal. The trunk is normal in power; the abdominal reflexes are present. The lower limbs are normal. Flexor response. Knee-jerks present; no ankle-clonus. These are the notes made by the clinical clerk.

As to the skin. The following details are mine: Distributed about the body are a number of red vascular areas, which become pale on pressure. The red vascular areas are most marked on the face and neck. A butterfly-shaped area occupies the centre of the face, covering the nose and cheeks and ending sharply on the upper lip, giving rise to a distinct circumoral pallor; elsewhere the area has a diffuse edge. There are symmetrical patches over the eyebrows, about a half-crown in size. The reddened area occupies the front of the neck, and extends over clavicles and on to the upper part of the chest, symmetrically. At the back of the neck, a palm-sized patch. The other symmetrical patches are on the backs of the shoulders, elbows, knees, and popliteal spaces. There is also a patch about the epigastrium.

A glance at the diagrams will show the symmetrical distribution better than a description (see Diagrams A, A *a*). I would

Diagram A.—Toxic dermatitis. Note the circumoral pallor.

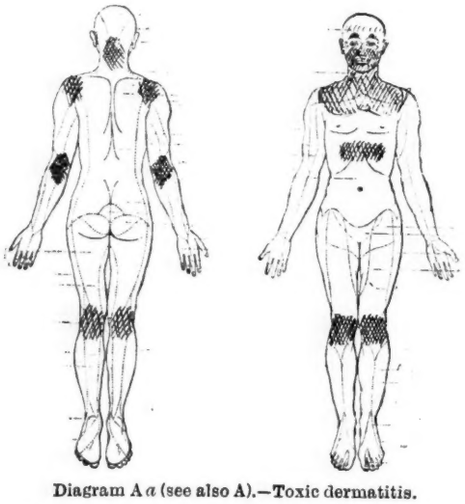

Diagram A *a* (see also A).—Toxic dermatitis.

call attention to the distribution about the face and neck, which recalls that observed in some cases of lupus erythematosus. What I also desire particularly to emphasize, in addition to the symmetry, is the fact that the vascular areas were distinctly made up of numerous dilated vessels (telangiectases). They were not inflammatory. Before the case was transferred on account of possible malignant disease (abdominal) the following notes were made by the clinical clerk:

July 20th: There is a large amount of pus in the urine and the patient is of a very hysterical temperament.

July 26th: The pus in the urine has to a great extent disappeared as a result of boric lotion wash-outs, etc. The hysterical condition has greatly improved under bromide, valerian, and electric treatment.

No definite diagnosis having been made, the patient went home. She died not long after. No necropsy was allowed.

Commentary.—**The original symmetrical rash, which manifested itself in successive outbreaks and which followed the ingestion of bad rabbit, appeared to have been due to an intoxication, the more so as no intestinal symptoms (elimination) followed. But taking the case as a whole, there were no doubt other factors (malignant disease, pus in the urine); and the patient was very probably already in a toxic condition when she ate some of the bad rabbit.**

There is no record of the condition of the urine when the patient was first seen; and, as no necropsy was allowed, no firm diagnosis could be made as to abdominal conditions. During life nothing definite was made out by those who examined the patient from purely medical (apart from dermatology) and gynaecological points of view. That the intoxication was a severe one is sufficiently borne out by the condition of the skin when seen by the late Dr. Radcliffe Crocker a month after the first skin lesions had appeared. This is further emphasized, in my opinion, by the vascular, telangiectatic state of the affected areas which followed, showing that the vessels had been smartly attacked in the first place. Perhaps the general toxic condition of the patient added to the damage already experienced by the vessels in the affected areas prevented their recovery. In a small way, a close examination with a lens of some of the elements of a squamous syphilide recently observed by me, which had been present some time and untreated by mercury, revealed a telangiectatic condition (H. 278), may be mentioned here from a comparative point of view. The telangiectatic form again of lupus erythematosus should be alluded to in the present connexion. At the present moment I have under my care an obstinate case of chronic lupus erythematosus of a vascular type distributed about the eyebrows, temples, and cheeks (G. 313). This case had previously been under the care of the late Dr. Radcliffe Crocker, and was seen by him originally after the disease had been present for two years.

The symmetrical distribution in the toxic case I have described was very marked. With regard to symmetry in diseases of the skin, various theories have been brought forward to explain them. Testut's monograph, 1877, on the subject is a classic now[1]; and other writers have followed on the same subject since that time. I do not propose to enter into details on this score as the matter is well known to those who have made a study of dermatology. I would merely in this place compare the distribution I have described with what obtains in some other more or less acute conditions.

First and foremost, as a typical symmetrical affection of the skin, I would again refer to lupus erythematosus. The bat's wing or butterfly patterns observed in that disease are familar to you all, but what is perhaps less so, on account of its rarity, is the distribution observed in acute lupus erythematosus d'emblée, a case of which I had under my care and which I have dealt with at large elsewhere.[2] In the patient I observed the distribution will be readily made out by a reference to Diagram B.

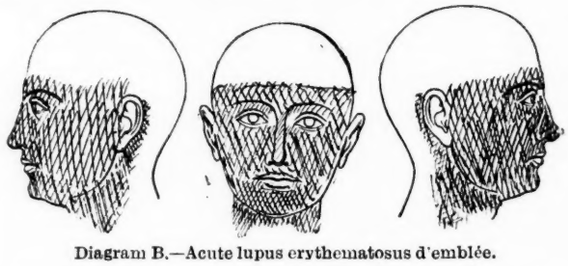

Diagram B.—Acute lupus erythematosus d'emblée.

There is also the early butterfly swelling observed in leprosy, as in Diagram C (for which I am indebted to Dr. Ashburton-Thompson of Sydney).

Diagram C.

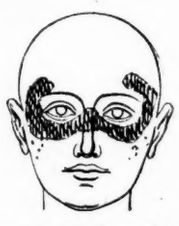

Diagram D.—Erythema haemorrhagicum faciei.

A more interesting symmetrical condition, however, is that exhibited in Diagram D (*Dermatology*, Book IV, E.). The patient was a female aged 23, and the condition—that is, erythema haemorrhagicum faciei—had been present fourteen days. The rash began on the face, the

forearms being subsequently affected. These are the notes made at the time by me: Purpuric punctiform and patchy symmetrical eruption of the face and nose. The patch does not disappear on pressure. Extensor surface of forearms: Slight mottling, leaving pale yellowish stain on pressure. Nothing on ears or fingers. The patient had been under a doctor for six years for asthma, she says. No history of rheumatic fever, scarlet fever, etc. No joint troubles. No haemorrhage from mucous membranes. Is not prone to excessive bleeding. Catamenia scanty. Bowels regular. Tongue furred. Father, *felo de se*. Mother phthisical. As to origin, the only thing that could be made out was that the patient had been a good deal in the sun. When seen not long after first visit little remained of the rash.

Diagram E. — Pellagra (note pale areas about orbits and mouth.)

There is another condition—namely, pellagra—in which symmetry may also be fairly marked, as can be seen in Diagram E (from cast of a pellagrous "mask" in possession of Professor Ludwig Merk of Innsbruck). Here, again, we have pale areas about the mouth and orbits.

This short contribution to the subject of acute toxic and symmetrical rashes of the skin may be of some interest. As to theories, I feel somewhat in the position of the man who did not believe in ghosts because he had seen so many.

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VARIATION AMONG BACTERIA.*

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THAT the medium in which a bacillus is growing may alter the morphology of the micro-organism has been shown to be true by a number of observers. Thus the *B. typhosus* has been found to grow out into threads when acted on by various dyes (Ainley Walker[1]), salts (Péju and Rajat[2]), urea (Wilson[3]), and by sewage (Almquist[4]). Similarly, Adami[5] has shown that by the action of a high temperature and the presence of peritoneal fluid the *B. coli communis* assumed a diplococcoid form, and in this case the fermentative characters of the bacillus were also profoundly modified. In most of these cases the organisms soon regained their normal characters when the active agents were removed; in other words, they were examples of fluctuating variations. Torrey,[6] Klotz,[7] and Twort[8] have shown that bacilli belonging to typhoid-coli and dysentery groups can be made to ferment sugars, on which at first they had no action, by growing them for some time in contact with these sugars.

I have on several occasions isolated from the intestine bacilli which required seven to twenty-one days to produce an acid reaction in lactose litmus broth, and two or three days more to produce gas. Where the reaction is so long delayed it is difficult to say whether one is to regard the organism as a slow fermenter of lactose or as a non-lactose fermenter which by contact with the lactose has acquired a new property. That there is this difficulty can be readily shown by the facts regarding the *B. typhosus*. It is invariably stated that this bacillus does not ferment dulcite, yet, like Penfold,[9] I find that when this bacillus is grown in peptone water containing this substance acidity is produced at the end of ten days. In the case of the several varieties of dysentery and pseudo-dysentery bacilli there is great irregularity in the time required to bring about fermentation of maltose and saccharose.

The explanation of the delayed reaction may be that variations occur among the bacilli growing in the medium and that those bacilli which are able to make use of a sugar which the others are unable to touch crowd out the latter. When a loopful of a culture which after a long delay has fermented lactose is planted out on the Endo or on the Conradi-Drigalski medium, the colonies formed become slowly reddish, a few being deeper in tint than the others.

When fermentation has occurred in a lactose tube and a second tube is inoculated from the first, in the second tube acid and gas are produced, as a rule, in twenty-four to forty-eight hours, although in the first tube it required several weeks to produce the same result. A third transfer to lactose broth results in acid and gas being produced in a single night. For the development of the lactose splitting enzyme it is necessary to have lactose present in the medium. By growing a bacillus which slowly ferments lactose in glucose broth the fermentative action on lactose is unaltered. The action on lactose results from adaptation. "The simple forms of life are able to adapt themselves to their surroundings, and the adaptation cannot be ascribed to chance, for with a given environment one particular alteration in properties surely results" (Adami[10]).

I recently isolated a bacillus from the urine of a patient, which is interesting from the fact that it possesses characters intermediate between those possessed by the *B. typhosus* and the *B. coli communis*. The patient was probably an "effective" typhoid carrier. Four years ago an epidemic of typhoid fever occurred in a fashionable district of Belfast, and the cases were centred round a certain milk supply. On investigation, it was found that one of the milkers had recently suffered from "influenza," complicated with jaundice, and her blood gave a well-marked positive Widal reaction in a 1 in 50 dilution. When the supply of milk from this dairy was stopped, the epidemic came to an end. There were 30 cases notified, several of whom died. I had no opportunity of examining the urine and stools of this woman, but I have no doubt that at that time they contained the *B. typhosus*. This woman developed Bright's disease, from which a few months ago she died. Through the kindness of the doctor in attendance, I obtained a specimen of her urine a week before she died, and it was from it that I isolated this peculiar bacillus. Its characters were as follows:

The growth on all the ordinary media was very similar to that of the *B. typhosus*, and gelatine was not liquefied. At 37° C. the bacillus grew well, but the growth was slightly more profuse at 22° C. It was Gram-negative and showed marked oscillatory characters, but no true movement of transposition. In peptone water a trace of indol was produced. The character which made the bacillus remarkable was its behaviour in media containing lactose. I noticed that the colonies on a Conradi-Drigalski plate remained blue as long as the bacillus was kept at 37° C., but that at room temperature they became red. Lactose-litmus-agar inoculated with this bacillus and kept at 22° C. became red in two days, whilst at 37° C. no change of reaction occurred even at the end of a month's incubation. The lactose in litmus broth tubes was but slowly acted on even at 22° C., but when the same medium was poured out into a Petri dish fermentation occurred in three days. The explanation of this phenomenon might be found either in supposing (1) that at 37° C. the lactose-splitting enzyme was not developed, or (2) that at this temperature products of proteid decomposition neutralized the acid resulting from the fermentation of the lactose. The following experiment showed that the first hypothesis was the correct one: Ten c.cm. of lactose peptone water were added to a series of sterile Petri dishes, some of which were inoculated with the bacillus, the remainder serving as controls. Half of these dishes were put into the incubator at 37° C., and half at 22° C. At the end of a week the amount of fluid in each dish was made up to 25 c.cm., and the number of cubic centimetres required to reduce 5 c.cm. of boiling Fehling solution was determined. It was found that all the sugar had disappeared from the plates which had been inoculated and kept at 22° C., whereas the amount of lactose present in the plates at 37° C. was the same as that in the control uninoculated plates.

We have here an example of the development of an enzyme being dependent on the temperature at which the bacillus is cultivated. This may be compared with the behaviour of the *B. prodigiosus*, which produces little or no pigment at 37° C. Coplans Myer[11] has met with bacilli which possess a similar peculiarity in reference to dulcite.

It was of interest to discover whether the agglutinogens of the bacillus were in any way associated with the lactose-splitting enzyme. The following experiment showed that there was no connexion between the two characters:

A guinea-pig was inoculated on several occasions with a growth of the bacillus on litmus-lactose-agar at 37° C., and a second guinea-pig with a similar amount of a culture grown at 22° C. The serum of these guinea-pigs was then found to have the same action on the two growths, and an absorption experiment proved that both strains could exhaust the agglutinins from both serums.

* A paper read before the Bacteriological Section at the Annual Meeting of the British Medical Association, London, July 29th, 1910.

Durham[12] showed that the saccharose-splitting variety of the *B. coli*—the *B. coli communor*—may be agglutinated by the serum of an animal immunized against a strain of the *B. coli communis*, whilst the serum may have no action on other strains of the *B. coli*, even although they are culturally identical with the one used to produce the serum. Torrey[13] also found, in his study of dysentery bacilli, that organisms acting in a different manner on the various sugars might have an agglutinable substance which was identical. Twort[14] and Penfold[15] have also shown that when the *B. typhosus* has been made to ferment lactose, no alteration in its agglutinable properties occurs.

The other fermentative characters of this bacillus were as follows:

At 37° C. mannite and maltose were fermented with the production of acid and a small amount of gas, whilst salicin, saccharose, and glucose showed acid formation alone. At 22° C., with mannite, maltose and salicin, acid and much gas were produced, with glucose and saccharose acid only. In the case of lactose gas was formed only at the end of eight days. Glucose neutral red agar shake cultures showed no fluorescence and no gas formation. In the fermentation experiments Durham's tubes were at first used, but in many cases the amount of gas formed was too small to be detected by their use. Agar and gelatine shake cultures were then used. We may state that typhoid serum had no action on this bacillus, and its homologous serum had no action on the *B. typhosus*.

To sum up, then, we have a bacillus which was isolated from a former typhoid carrier, and which formed acid but no gas in glucose media, and which fermented lactose at 22° C. but not at 37° C. In not developing gas in glucose media but forming some from mannite it resembles certain colon bacilli of the "anaërogenes" class previously described by me,[16] and which form connecting links between the *B. coli* and the *B. typhosus* group of micro-organisms.

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THE THERAPEUTIC ADVANTAGES OF USING MERCURY IN THE COLLOID FORM.

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FOR a long time mercury has held a very important place in the list of drugs. So valuable has it been in the treatment of syphilitic disorders that it has been recognized till quite recently as the specific drug *par excellence*.

The only difference of opinion with regard to mercury seems to be not as to its value, but as to the best method of administering it.

There are many methods of using the drug—such as inunction, fumigation, baths, endermically (by dusting), hypodermically, inhalations, and per rectum—and the mere fact that so many methods have been tried is evidence not only of a praiseworthy determination, but also that each method has some unfortunate disadvantage.

To introduce a method that diminishes the disadvantages, but at the same time destroys the value of the drug, is waste of time; but if one can suggest a form of administering the drug which possesses advantages over all the others, and at the same time is *minus* most, if not all, their disadvantages, one is, I venture to think, justified in making it public.

The form of mercury that is, in my opinion, worthy of such justification is hydrargyrum colloidalis, or colloid mercury.

The subject of colloids is one that has become of great interest during the last few years, and is one that is worthy of great attention and much study.

In the *Practitioner* for September of this year I made an attempt to point out the part played by colloids in physiology and pathology, and, imperfect and incomplete as is that attempt, it is sufficient, I think, to show how great are the possibilities of the subject.

The term "colloid" was first suggested by Graham about 1861, but is employed now in a sense somewhat different from that in which he used it. At present the term "colloid" refers not so much to a certain class of substances, but rather to a condition which a large number of chemical compounds may assume more or less readily.

One great characteristic of colloids is that the substance forming the "solution" is unable to pass through an animal or vegetable membrane—that is, a dialyser.

Colloids are classified as reversible and irreversible. By reversible we mean those colloids whose solutions leave a residue soluble in water when desiccated at the ordinary temperature, and by irreversible those that yield an insoluble residue.

As examples of reversible we have dextrin, gum arabic, many albumens, isinglass, etc.; whilst the colloidal metals are irreversible. If solutions of reversible are added to those of irreversible colloids the latter may become reversible, in which case they are often protected against precipitation by salts.

In this way is explained the great value of adding gum arabic or barley water to milk in order to prevent the coagulation of casein—at least, in huge masses.

Colloid mercury, therefore, comes under the heading of "irreversible colloids."

Colloidal solutions of the heavy metals are prepared by passing a suitable electric current through water in which the metal is suspended, when particles of the metal are torn off in such a fine state of division that they do not subside on standing for months.

The solution appears homogeneous under the microscope, though the presence of the particles are readily demonstrated by means of the ultra-microscope. The metallic solution passes through filter paper, but has no osmotic pressure; the freezing and boiling points are those of water.

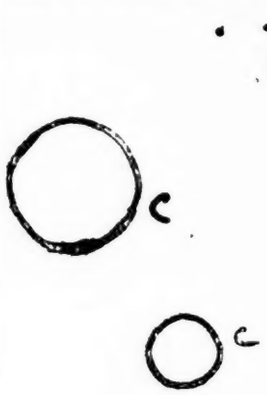
When a colloid such as colloid mercury has separated out, it is quite impossible to restore it to the original condition by any mechanical means (as one does with suspensions), because the separation is due to an irreversible change which is described as coagulation.

In order to convert this separated mass into the colloid form again one must employ chemical or electrical energy, and naturally when coagulation occurs energy in the form of heat is given off. The importance of this statement is very great, as it means that the energy in the case of colloids is kinetic, whence the value of such a drug as colloid mercury.

The kinetic energy of a drug such as colloid mercury is closely associated with the surface tension of its ultramicroscopic particles. On the surface of a round body like a blood corpuscle floating in a liquid there is a practically constant surface tension which is necessary for its life, and any interference with that surface tension interferes with the life not only of the corpuscle, but also of the whole body.

The same remark applies to the various micro-organisms, which have their own special surface tensions, and require such pabulum as is consistent with the maintenance of that surface tension.

Around the ultramicroscopic particles of a colloid solution is a certain definite surface tension, and the introduction of electrical energy has the effect of increasing the surface tension by diminishing the size of the particles, but at the same time increasing the surface area. The mixing of two colloids may have the effect of causing such a great interference with the surface tensions of the particles of both as to cause coagulation.



The meeting of colloids with, say, cocci or corpuscles has exactly the same effect—namely, an alteration of the surface tension—and consequently the life of the cocci or corpuscles is affected.

To appreciate this statement to the full one is helped by a glance at the diagram, where C and P represent the relative sizes of cocci and ultramicroscopic particles.

Like as the faintest suspicion of a touch destroys a bubble, so does the presence of these minute particles affect the surface of the cocci, with perhaps not quite so dramatic a result.

Disease affects the colloidal contents of the blood serum, rendering it possible for the micro-organisms to thrive by adapting their life or surface tension to the new conditions, and the object of giving drugs is so to alter the colloidal state or surface tension of the serum as to make it incompatible for the micro-organisms or the *inimical enzymes* to survive.

En passant one may remark that the enzymes are all colloidal.

The value of the calcium salts, such as the chloride, iodide or permanganate, is due to the fact that they stimulate the leucocytes to increased work in the form of phagocytic action, a result produced by altering or affecting the surface tension.

With the object of testing the effect of colloidal mercury on micro-organisms, some experiments were carried out for me at the laboratory of Mr. Seyler, county analyst for Glamorgan, and it was found that 1 in 1,000 of a 1 per cent. solution of colloidal mercury supplied by Merck stopped the growth of the *Bacillus coli communis* on agar, which means that 1 in 100,000 of the drug was effective.

In colloidal mercury we have, therefore, a very powerful antiseptic. A 1 per cent. solution of hydrargyrum colloidalis is a greenish-brown transparent liquid, without any smell, but has a faint metallic taste. It is non-irritant, non-corrosive, and relatively non-toxic. As a drug it can be used both externally and internally. Externally it has a very good cleansing effect on wounds, when applied in solutions of $\frac{1}{4}$ to $\frac{1}{2}$ per cent.

In ringworm of both the large and small spored varieties, as well as in two cases of alopecia areata, colloidal mercury has been very beneficial.

In these cases my rule has been to remove the grease on the scalp with petrol before applying the drug, otherwise it has no opportunity of coming into close enough contact with the disease.

As a mouth wash mercury in this form is very effective in very filthy states of the mouth, whilst as a spray its effect has been extremely good. In typical diphtheria cases a few applications of the spray have produced an effect almost as rapid and satisfactory as that following the injection of antitoxin. For tonsillar patches of all sorts it is of extreme value, though for mere redness or inflammation of the tonsils and pharynx it is not quite so effective.

Administered internally it is of value in acute gastritis, either of babies, children, or adults. I usually prescribe for babies 3 minims of the 1 per cent. solution to a drachm of water, and for adults 20 to 30 minims. The ease of administration compares favourably with that of, say, grey powder.

It is in syphilitic cases, however, that the great advantage of colloidal mercury is seen. I have not seen any unpleasant symptoms, such as salivation, sickness, or distaste for food, but in one patient who was taking 6 drachms daily the bowels were evacuated too freely until the dose was reduced by half.

One patient who came to me in the first stage of the disease with a hard sore on the dorsum penis was able, after taking the drug for twelve months, to state a complete freedom from rashes or sore throat.

Patients with secondary rashes have responded well and readily to the treatment, but the best or most striking effects have been in cases generally reserved for the iodide of potassium or calcium.

A long-standing tertiary infiltration or inflammation of the scalp had resisted all attempts to remove it. Potassium iodide was impossible on account of the coryzal symptoms, and although calcium iodide was easily taken without any unpleasant effects, the result was not satisfactory. After four weeks' treatment with colloidal mercury the scalp and forehead began to clear rapidly, and at the end of ten weeks the patient was quite free.

In this case the dose was 6 drachms daily.

Another case was that of a soldier who had contracted the disease in India, and presented tertiary sores of a very troublesome and unpleasant nature. Colloid mercury was applied locally and given internally, with rapid and very satisfactory results, although all other previous attempts had completely failed.

An interesting case of locomotor ataxia, seen also by a well-known brain specialist, who suggested the daily application of blue ointment to the spine, was placed by me on colloidal mercury, with a most satisfactory result. The bladder trouble has disappeared and the shooting pains down the legs are less severe and less frequent.

A case of spastic paraplegia, however, quite failed to take the drug even in the smallest doses, on account of the severe "depression" it produced.

Organic nervous lesions which fall into the category of syphilides respond to a certain degree to the internal administration of colloid mercury, but the other organic nervous lesions do not respond at all.

THE ETIOLOGY OF IRITIS.

BY

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IN a leading article in the BRITISH MEDICAL JOURNAL of July 16th last, my opinion that rheumatic iritis is a very rare disease is referred to, and I am rightly quoted as holding an extreme view. Mr. C. W. Jennings, of Philadelphia, on the other hand, believes that it is a common disease. This divergence of opinion is probably due to a difference of diagnosis rather than to a difference in the incidence of the disease. It is extremely unlikely that certain forms of iritis are more prevalent, to any considerable extent, in some countries than they are in others, and it is much more probable that the explanation is to be found in the grouping and labelling—that is, in the personal equation. Critical inquiry in many cases will, I believe, show that the "rheumatism" which produces rheumatic iritis is not true rheumatism, but a gonococcal or other toxaemic infection. No one now, I suppose, believes in gonorrhoeal rheumatism, the vestigial term remains as a mere *façon de parler;* but we all accept the fact of a gonorrhoeal arthritis. We still make use of the antiquated term much in the same way as we still call our bronze ha'pence "coppers." We can, if we like, keep our strychnine in a sulphate of magnesia bottle, as long as we remember the fact. Nevertheless, there are manifest objections to doing so, and in like manner the sooner we get rid of the term "gonorrhoeal rheumatism" the better.

My views concerning the rareness of rheumatic iritis were published in the BRITISH MEDICAL JOURNAL (July, 1908), and I will not trouble you any further with them. With regard to the differential diagnosis of gonorrhoeal from other forms of toxaemic iritis, there is as yet no extensive literature, but the chief distinction seems to me to be that in the former the arthritic (or periarthritic ?) symptoms are more pronounced.

It has been, I think, too much the custom to classify all cases of iritis that are not obviously specific, or gonorrhoeal, or traumatic, or occurring in gouty patients, as rheumatic, including amongst them a number of cases due to various forms of toxaemic absorption. As time goes on we may expect a more limited definition of the term "acute rheumatism" than the present all-embracing one of a polyarticular synovitis with pyrexia; and when that time comes there will be a corresponding fission in the definition of rheumatic iritis.

From Mr. Kenneth Campbell's letter in the BRITISH MEDICAL JOURNAL of July 23rd, 1910, criticizing the leader above referred to, it is clear that he is not only a supporter of my view, but also that he goes a step further than I have ventured to go with regard to the existence of rheumatic iritis, for he excludes rheumatism absolutely as an etiological factor in iritis. In the present state of our knowledge I have not made this final renunciation, because careful observers say that they have seen cases as a result of chronic rheumatism, and cases are also reported as occurring in acute rheumatism. It is desirable that full details of all cases of iritis occurring during the acute stage of rheumatic fever should be recorded. It does not follow, because a patient has an intercurrent attack of iritis during rheumatic fever, that it is due to the same virus. Moreover, it may be that occasionally the arthritis is not rheumatic.

The incidence of iritis during the acute stage of rheumatism is universally allowed to be extremely rare, but a case in which it followed shortly after is recorded by Forster,[1] of Lowestoft, and it is a most interesting and instructive one. The patient, a girl aged 12½, had an attack of acute rheumatism in which the acute symptoms lasted fourteen days and then subsided. Three days later chorea came on, and when it had lasted four weeks a monocular iritis developed, followed by endocarditis. It is to be noted that the iritis did not develop during the acute stage of the rheumatism. Eventually the child got quite well. Here the sequence of events is so marked, so obvious, that to argue that we are not dealing with cause and effect would appear to require the strategy of a dialectician. Strategy has no place in a scientific discussion, and we must allow that if cases such as this were frequent there would be nothing more to be said. But the fact of their extreme rarity requires very great consideration, especially when we remember how common are cases of so-called rheumatic iritis. The weakness of the position is shown if, instead of arguing from the particular to the general, we reverse the process. A patient is brought to us with so-called rheumatic iritis. How do we know that it is rheumatic? Having excluded syphilis and gonorrhoea, and found that at some time the patient has had acute rheumatism, we label the case and pack it away in a mental pigeon-hole as an undoubted instance of rheumatic iritis. Perhaps if we had asked the patient if he had ever had measles we should have received also an affirmative answer. If, however, the patient has not had acute rheumatism we inquire about rheumatic pains, and rest satisfied with our diagnosis if we can detect more or less evidence of swollen joints or aching limbs.

Turning from the clinical aspects to bacteriological investigations, we find evidence pointing to the artificial production of iritis by the rheumatic diplococcus or micrococcus. Although Fritz Meyer, Ainley Walker, and Beaton do not appear to have produced it, Poynton and Paine, in their contribution to the *Transactions of the Ophthalmological Society* (vol. xxiii, p. 39), report that iritic symptoms ensued in rabbits after the intravenous injection of cocci, in one case from ordinary rheumatic fever in a child, and in another from malignant endocarditis of rheumatic origin. In no other case were there symptoms pointing to iritis, although they made repeated experiments. In their first successful case, on the seventh day there was injection of the conjunctival vessels, discoloration of the iris, and considerable exudation into the anterior chamber. But they state that the appearance was not like that of hypopyon. The rabbit died on the tenth day. The symptoms do not appear to have resembled altogether those one is accustomed to see in the condition generally designated rheumatic iritis, and they suggest the possibility of a purulent or metastatic choroiditis. The iritis occurred in the left eye only, but it is not stated into which ear the injection was made. In the second case the injection was made into the ear of a rabbit intravenously, the culture being prepared from the case of a boy who died from malignant endocarditis two years after an attack of acute rheumatism. In four other rabbits that were injected from the same source there was no iritis. In this case the evidence furnished by the authors seems hardly sufficient proof that the endocarditis was undoubtedly due to the *Diplococcus rheumaticus*. Bearing in mind the multiplicity of organisms capable of producing malignant endocarditis, and the fact that the ordinary pyogenic organisms are responsible for the greater number of cases, it seems desirable that further investigation as to the identity of the micro-organism should be made.

According to C. W. Jennings, rheumatic iritis is a common form of the affection, 25.4 per cent. of all cases being due to it. Nevertheless, the absolute connexion of rheumatism and iritis, both clinically and bacteriologically, is still lacking.

In looking through my cases, I find that in the last 80 private patients suffering from iritis, excluding traumatic, there were 4 who had suffered from acute rheumatism at some previous time; 5 per cent. is not a strong basis upon which to erect an etiological superstructure. Many of the other patients confessed to "rheumatic" pains of varying intensity when asked; but do not a large number of patients suffering from any disease usually acknowledge that they are rheumatic when the leading question is asked? Evidences of rheumatism, or at least of arthritic disease—such as distorted or fixed joints or nodules—were seen in 7, whilst gonorrhoea was acknowledged to have preceded the iritis by not more than two years in 9 patients, and specific disease accounted for 15. I repeat that I think it too frequently happens that if we can exclude syphilis and gonorrhoea, we are satisfied, when we find that the patient has indiscriminate pains in indeterminate regions, to call an iritis rheumatic. In many of such cases further investigation might throw doubt upon the diagnosis. Patients cannot be expected to say anything about diseases which they think have no connexion with their eye trouble, and so it happens that nothing is mentioned by them about a previous septic throat or pyorrhoea alveolaris. Haematemesis and dysentery and dyspepsia are overlooked, and toxaemias of all descriptions are forgotten.

In conclusion, it is desirable that full details of all cases of iritis occurring during the acute stage of rheumatic fever should be recorded. If the physicians of the large London and provincial general hospitals, who see so many cases of acute rheumatism, would help in this direction, a definite conclusion might be arrived at.

REFERENCE.
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THE NORMAL ORTHOGRADE POSTURE.

BY

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In the course of my clinical work, in order to effect the lasting cure of many throat, nose, voice, and speech patients, I found the absolute necessity of certain measures which, when first adopted by me, were purely empirical. Such measures were suggested by the results of gymnastics, breathing exercises, and voice training as adjuvants to accepted medical and surgical treatment and educational and hygienic routine.

At that time these collateral measures were completely ignored in the textbooks on, and in the clinical teaching of, laryngology and rhinology in this country. But to such an extent had they become part of my own regular treatment and instruction that in 1893[1] and onwards I published clinical lectures and statements advocating regular postural, respiratory, voice, speech, and nerve co-ordination training for the re-education of patients defective in those respects. Continuous experience has naturally led to many improvements in detail for therapeutic application, while incessant inquiry into the scientific basis of such matters has opened up some interesting problems.

The point I desire to refer to on the present occasion is the uncertain signification of the term "normal orthograde," "perfect erect," or "correct" posture. Since the erect posture is the resultant response of man's central nervous system and musculo-skeletal machinery to gravitation—"the chief resistance to be met by terrestrial animals" (Herbert Spencer[2])—and the contest is a life-long one, there should be no doubt or ambiguity about what is the "normal" in posture.

Without any precise conception of what is man's normal erect posture in standing, few have denied the importance of a good carriage. The Greeks, indeed, we learn from Aeschylus, Xenophon, and Hippocrates, had several words signifying "upright posture," and such erectness was doubtless one of the main aims and results of their physical training. Among the Latins both Ovid and Cicero spoke of "erectness" as the great human feature. Surgeons recognize the influence of habitual exaggerated faulty postures in producing numerous deformities. Physicians also seek to correct a rounded back and sunken chest, which cramp and crowd the lungs, heart, and abdominal viscera. Anatomists, too, have recognized the vast changes in man which have directly

resulted from his assumption of the erect posture in his descent from a pronograde ancestor; and lastly, physiologists are well aware of the influence of gravitation and of extreme changes of posture on the circulation.

In spite of all this, as far as I can find, no attempt has been made to accurately define the "normal orthograde posture," or to consider whether certain variations of posture—habitual deviations from the normal which might at first be thought minor or insignificant—might not be responsible for very grave derangements in the working of the body, although the latter might be of very slow evolution.

My contentions are:

1. That gravitation is potent in varying the relative positions and mutual pressures and frictions of such contiguous solid organs in the body as are capable of relative displacement as well as in altering the tensions these experience in postures differing, perhaps, but slightly from each other. Such variations in posture tend to induce different types of respiration which still further alter the distribution of mechanical force incident at any spot. It is obvious that the brain and musculo-skeletal mechanisms bring about co-ordinated adjustments to preserve the equilibrium, while at the same time the necessary movements for the oxygenation of the blood and other internal movements are going on. Also the injurious effects of any excessive incident mechanical forces are concurrently obviated by similar co-ordinated adjustments, which are deep reflexes initiated in end organs at sites of excessive incident forces, and having as their objects the inhibition of the conditions causing such abnormal pressures. There are nevertheless limits of time and degree to Nature's protective adjustments. If faulty postures and their concomitant faulty modes of respiration—especially belly-breathing—are habitually and incessantly adopted, a large body of clinical evidence shows that pathological changes take place at the sites of incidence of excessive intrinsic mechanical forces, and as a direct consequence thereof, and of a nature varying with the intensity and duration of the incident force, and the variety of cell or tissue acted on.

2. These facts can and should be utilized by physicians as potent aids in the cure and prevention of disease and promotion of health. The method I have elsewhere outlined,[3] and have named psycho-postural-respiratory training.

3 Systematic inculcation of the normal erect posture during growth, and the type of respiration naturally associated with it—being the active conscious neutralizing or antagonizing of the faulty postures of modern civilized life—is the main factor in the arrest of physical degeneration, and will promote the return of the human form to that of the ancient Greek.

An essential preliminary to the examination of my contentions is an accurate definition of terms. What, then, is the normal orthograde posture? The word "orthograde" is a hybrid not discoverable in the classics, but having been adopted by anatomists and anthropologists as the equivalent of "erect," I shall use it in that sense.

The subject of "posture" appears to be consigned by general consent to a "no man's land" adjacent to the borders of many sciences. None of them seems to desire it. Most leading works on anatomy and physiology ignore it. Schäfer's[4] standard textbook is a notable exception, but even in this his contributor, Haycraft, after discussing the experimental work of the Webers, Braune, Fischer, and himself, lays down no conclusion for the guidance of physicians and educationalists.

Is the problem insoluble? I think not. It is quite true that three serious fallacies beset all the inductive work that has hitherto been done.

1. On setting out to determine the "normal," the experimenter has started with the assumption that the subject under observation was "normal," which may not have been the case.

2. It has been assumed that the distribution of weight is the same in the horizontally-placed, non-breathing, frozen cadaver as in the vertical-standing breathing man. This obviously omits the influence of gravitation, one of the main factors in the normal erect posture.

3. There has been mental confusion between the "normal" and the "average."

The true normal in living man cannot be found by measuring a chance hundred of so-called "ordinary healthy individuals" and taking an "average." Each of these individuals of to-day has been more or less similarly subjected to similar injurious influences of civilized life—for example, long-continued and repeated bad postures during growth and habitual work, such as lounging, school desks, easy chairs, feather beds, corsets, badly-shaped boots, imitation of bad models, sedentary habits—without sufficient compensation for those influences by others calculated to systematically antagonize their injurious effects on the working and form of the body. The average obtained from such subjects must be something "abnormal" or "subnormal," even if not greatly removed from the "normal." Although "normal" is a term with many meanings and applications, it surely should imply in anatomy a "standard of perfection of form and structure" to be aimed at; and in physiology the "mode of obtaining optimum efficiency" out of the human machine or of getting it to do its routine work with least possible expenditure of power. If orthodiagraphs, etc., had been available 500 B.C. and applied to a chance hundred "ordinary healthy individuals" among the ancient Greeks, the resulting average would have given a so-called "normal" very different to that gained from civilized moderns to-day.

The "normal," then, must be an "ideal," gained from all men of all time. Loose unsatisfactory conceptions as to the "normal" are responsible for a large part of the defects, deformities, disease, and degeneration of to-day, because slighter deviations therefrom, which can be corrected in an early stage by training, are neglected until their results are irremediable. It follows that what is "normal" should be authoritatively laid down by scientific experts to doctors and teachers wherever possible. Is this possible in the matter of posture?

We may have been driven to the conclusion that in living man the "normal" in such matters as posture and breathing is not determinable by experiment or observation of averages. The inductive method, supreme as it is in arriving at conclusions when only one variable exists in the phenomena under observation, shows its limitations when there are indefinite simultaneous variables, including man's central nervous system, gravitation, oxygenation, etc.

In such cases to find truth it is necessary to work deductively from general philosophical principles and frame hypotheses to be subsequently tested whenever possible by experiment, but also by reasoning from the observed effects.

The advertising schools of physical culture have, of course, prematurely exploited the unoccupied field. I show pictures of what is deemed the "correct posture" in standing, published by the professors of eight of these systems, English or American, vaunted as original. When analysed by vertical and horizontal parallel lines, they are seen to be purely fancy pictures, *ad captandum vulgus*, and some show incompatibility with the law of gravitation. They all differ from each other, and from what I show as, and give reasons for regarding as, the "normal" erect posture to be aimed at in education and in therapeutics. It will be seen from other pictures shown how largely my conception agrees with that of the figures on vases and monuments of all ancient races as contrasted with modern sedentary and slouching peoples.

Approaching posture from a deductive standpoint my arguments are as follows: The living body is a complex machine or engine for the transformation of energy derived from its intake. The object of the life of an animal is the dominance and persistence of the species to which it belongs. To secure optimum efficiency for each individual of the species as long as it is at work, and to maintain such efficiency as long as possible, afford an ample object for economy of force in the living machine. A maximum aggregate of power is thus rendered available for the whole species in its combat with the environment.

Man's erect posture is an immense source of economy to him, owing to the increased vertical elevation above the ground of the distance receptors—the organs for sound, light, and smell. He has, therefore, an enlarged horizon of environment. This not only gives him increased and early knowledge of favourable and unfavourable events in that environment, but affords time for deliberation and contrivance in avoiding dangers or pursuing benefits—an

immense advantage in the economy of energy both for the individual and the species as against most pronograde competitors in the struggle for existence. The chief change producing maximum vertical elevation of the head is the bringing the axis of the vertebral column and of the lower extremities into the same vertical line. This is rendered possible by man's increased power of extension of the hip and knee joints. The necessary distancing is effected by the willed extension of the vertical axis in which are the centre of gravity of the cranium, the vertebral column, the pelvis, and the lower extremities.

The weight of the body being borne entirely by the lower limbs, the upper limbs, freed from the task of aiding in station and progression, become available for prehension and movements involving delicacy of touch and manipulation, such as writing—that is, making distinct signs to represent sounds or things, and setting free the jaws, teeth, and mouth for other purposes. These latter, eased of their functions as weapons of offence and defence against enemies, and from the duties of seizing food, are left free for the duties of speech—that is, the modification of the laryngeal voice to make distinct articulate sounds to represent different things and the better expression of the emotions. Hence the erect posture gives man advantages as to sight, sound, smell, touch, and delicate manipulation, voice, and speech, which are represented structurally in the increased intricacy and quantity of his brain structure. These increasing powers demand increased attention to man's early training. Man's education does not always demand conscious instruction. In the absence of unfavourable circumstances, he can learn by unconscious imitation of good models.

While natural selection was bringing about maximum vertical elevation of the head, *pari passu* man was learning to secure maximum stability of bodily equilibrium in the most erect posture. To do this with the minimum expenditure of energy involved much redistribution of the weight of the skeletal and visceral structures around the new vertical axis, in obedience to gravitation, so that the plumb-line through the centre of gravity might fall within the diminishing area of support now restricted to the feet.

Among the changes promoting maximum stability of equilibrium are:

(*a*) The structure and strength of the foot and ankle-joint.

(*b*) The inclination of the pelvis to the spine.

(*c*) The anterior convex lumbar curve of the spine.

(*d*) Shortening of the antero-posterior diameter of the thoracic cage as compared with the transverse.

(*e*) The balancing of the head on the atlas by the occipital condyles coming to lie in the median fifth of the base of the skull: (*b*), (*c*), (*d*), and (*e*) help to bring the centre of gravity of the trunk over the hip joints.

Further changes to save power are:

(*a*) The adhesion of the central tendon of the diaphragm to the fibrous pericardium and so to the deep fasciae of the thorax and neck so as to aid in mechanically supporting the viscera.

(*b*) The fixation of the intestine to the abdominal wall by additional mesenteric adhesions forming mechanical supports.

(*c*) The maximum use of the passive skeletal structures (bones, cartilages, and ligaments) to resist gravitation and maintain the form and posture of the body, the equilibrium being automatically controlled by the cerebellum so as to minimize expenditure of energy on both cerebral and muscular accounts.

(*d*) The increased complexity of brain organization and development.

The tendency of all these modifications in structure is to promote economy in the expenditure of power in the working of the human machine. Nature exemplifies this "principle of optimum efficiency" in all her works, and man's structure and function are "normal" in as far as he is educated to habitually conform to this ideal or standard.

Applying these considerations to the present problem, the normal orthograde posture may be defined as that in which:

1. The centre of gravity of the head is vertically over the centre of the base of support.

2. The vertical plumb-line joining these points bisects the median transverse occipito-condyloid axis, and also the intercotyloid axis, passing through also the centre of gravity of the mass made up of the trunk and upper limbs.

3. The centre of gravity of the head, that of the trunk, and the centre of the base of support, are actively distanced as much as possible from each other by fullest possible extension of the vertical axis in which the above points lie with each in-breath until the extension becomes automatic and unconscious.

This posture should be the basis of all physical education for the young. It is the ideal we should seek for every child, the one we should endeavour to get stereotyped by growth in form and structure, the one to which such child should automatically return after action or relaxation. The subject trained thus has an easy and graceful carriage, a straight back, well-poised head, a raised, expanded, and mobile thorax well distanced from the pelvis, a flat abdomen, and all the internal organs in constant correct position for best work. The postures permitted and taught by some physical culturists with retracted head, stiff neck, protruded abdomen, hollowed back, and bent knees, do not comply with my definition, and are absolute caricatures of the normal erect posture, and directly produce deformity and disease. Moreover, the normal erect posture is the fundamental essential for all efficient respiration, correct voice production, and speaking. Lastly, the influence of the normal erect posture in the prevention and treatment of disease is of a potency as yet but barely suspected. Limits of time and space prevent my entering into details here, and I must refer readers to other papers on the subject. For the present I venture to invite scientific experts to consider my definition of the normal orthograde posture.

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Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

COLLAPSE IN A BABY.

THE following case seems to me of interest from the cause of the attack compared with its severity:

A few months ago I was called in to see a baby who was said to have had a "fit." He was a male baby, 5 months old, was farmed out, and had only been with the present people about a month. So far as could be made out the following was his history. He was bottle-fed after the first month, but had always been healthy except that for the last six weeks the bowels had been irregular, chiefly constipated, though for a week previous to the attack he had had slight diarrhoea and seemed to have pain when his bowels acted. About 5.30 p.m., when he was having his bottle before being put to bed, he took a little of the feed and then cried, took a little more and cried again, and then finished the bottle. Almost immediately he became sick and brought up most or all of the feed, which was said to be in the same state as when swallowed. As this had soaked his nightdress he was laid down to have it changed, but he suddenly became pale and unconscious.

While the people were waiting for a doctor to come he was put in a warm bath and then rolled in a blanket, but he did not show any signs of reviving and gradually got colder. Once or twice he was supposed to be dead, and they were not quite certain if he were alive when I came.

On my arrival, about half an hour after the attack commenced, I found him quite limp, the head and limbs falling about when he was moved; he was cold all over, extremely pale, no pulse to be felt; the eyes were partly open and the conjunctivae insensible to touch. There were slight sighing respirations at intervals, but no other signs of life. I do not remember auscultating the heart.

I put him in a hot bath and splashed cold water in his face, while a blanket and flannels were being heated, and when they were ready he was dried and laid on a warm

blanket in front of a fire and rubbed with a hot flannel. At this time his tongue and the inside of his mouth felt cold and clammy and were quite pale, and on putting my finger in as far as the epiglottis to see if I could stimulate the breathing there was no sign of sensation and the whole region felt cold.

I had no hypodermic with me, but had some sal volatile, so I dropped a mixture of that and peppermint water on the back of his tongue. In ten to fifteen minutes this stimulated the throat sufficiently to cause swallowing, and, continuing with the sal volatile, fire, and hot flannels, he slowly revived. In a few days' time he seemed all right again.

This case evidently was not a fit, but a faint, due seemingly to some stomach irritation. Instead, however, of relief having been given by the bringing up of the stomach contents, this seems to have been the cause of the collapse.

It is rather interesting to find so long a collapse from so seemingly trivial a cause, for the baby must have been nearly an hour without a pulse that could be felt, and with sighing respiration, and when the pulse did appear it went again unless sal volatile was given freely.

I have no reason to doubt the history of the attack, and poisoning can be excluded, as two other babies in the same house were not affected in any way.

I have never seen such a case of collapse in a baby before, and for some time did not expect him to recover—a dead faint for nearly an hour, and mouth and tongue cold and clammy, seemed hopeless. I should be grateful if any of your readers who have had a similar case could let me know what the mouth or rectal temperature fell to, as I did not take it, and do not think an ordinary thermometer would register it.

RONALD T. HERDMAN, M.B., C.M., D.P.H.Camb.
London, N.

FRACTURE OF THE FEMUR AT BIRTH.

IN April, 1909, I was called in to attend the confinement of a primipara, and on examination found a breech presentation with the legs extended. The labour was protracted, and the patient considerably weakened. Attempts at version and at bringing down a leg were made, but without success. It was also found impossible to effect delivery with the fillet or the finger in the groin. At this stage it was thought that the child could not be born alive, and the patient being anaesthetized, a blunt hook was used. Considerable force had to be exerted before delivery could be accomplished. The child was a large boy, and was alive, but the upper part of the shaft of the left femur was found to be fractured, and there was some laceration and considerable bruising of the soft parts in the groin. The question of treatment was a difficult one, for the conditions of the groin precluded the use of most of the recognized methods of treatment. For example, it was soon found impossible to maintain the limb flexed against the abdomen, according to Credé's original method, on account of the difficulty of looking after the wound complicating the case. Suspension in a special frame, with the legs vertical, has been tried with success in these cases, but I soon abandoned it as unsatisfactory.

The extension seemed quite unnecessary, and there was constant trouble and difficulty in keeping the limbs in proper position without interfering with the circulation. Feeding and bathing were also rendered very difficult by this apparatus. Whilst beset with all these difficulties in looking after the case, Dr. Isbister of North Sydney published an account of a splint which he had used with success for similar cases. In the BRITISH MEDICAL JOURNAL, April 17th, 1909, is a complete account of his apparatus with illustrations. Messrs. Maw and Sons made a similar splint for me and the treatment of the case was comparatively simple by its employment. It is made of aluminium, only weighs about 2 oz., and consists of a band which surrounds the abdomen, an angular splint which keeps the knee and hip joints flexed, and a connecting band between the two parts. From my experience of its use I have nothing but praise for it. The mother and nurse were extremely pleased, for the infant was quite comfortable in this splint; he could be fed at the breast without any difficulty; he could be bathed and dressed quite easily, and could be taken out in the perambulator without attracting any special attention. The result was quite satisfactory. Union took place with fragments in good position. After about six weeks the splint was discarded and gentle massage begun. There was considerable formation of callus but this gradually disappeared. There was no deformity and a shortening of only about ¼ in. The case was seen about six months after birth by Mr. G. Lenthal Cheatle, who wrote:

> I am sure you are to be much congratulated on the result, as it was a most difficult case.

I attribute the successful issue in great measure to the splint which was used, and am happy to add my experience of its success to that of Dr. Isbister.

East Sheen, S.W. CECIL JOHNSON, M.B., Ch.B.Vict.

ACUTE POISONING BY *TRACHINUS VIPERA* IN NORMANDY.

A FEW days after our arrival at Les Grandes Dalles, Normandy, I caught a number of prawns and small fish with a prawning net, and had placed the catch in a fisherman's basket, when my son, a Merchant Taylors boy, aged 15, handled the contents of the basket and seized a small fish, which happened to be a small *Trachinus vipera*. The fish stung the boy on the index finger of the right hand about the middle of the second phalanx. Immediately after the injury had taken place the boy complained of severe, nauseating pain going up the hand, arm, and up to the shoulder. I was not cognizant at first of what had happened, but on being told by an old sailor that the wound of this fish, called in Normandy "vive," was considered to be very dangerous, I at once went some three-quarters of an hour's distance with the patient to a chemist, no medical man being in the vicinity, who told me that to his knowledge four persons who had received similar wounds had died from the effects. In the meantime, about one hour after the accident, the finger had swelled up, and was of a dark blue colour and very painful; the hand was swollen up to the wrist, and the boy felt very faint and ill. I had seen cases of snake bite in the West Indies, and had seen good results from alcoholic stimulation (brandy and wine), and injections of permanganate of potash solution into the wound; but as the boy was in great agony—in fact, he said he felt he was going to die—I decided at once to get rid of as much venous blood from the affected area as possible, and accordingly made a deep and long incision into the swollen tissues of finger with a scalpel which the chemist lent me. Bleeding from the incision was encouraged by rubbing the arm and forearm in a downward direction. After about one hour's interval less pain was experienced, and the finger, which before had been perfectly stiff, could be slightly bent.

Treatment afterwards consisted in bathing the hand and forearm continuously for days with 1 in 600 permanganate of potash solution and 5 per cent. carbolic acid alternately—the carbolic seemed to give the greatest relief—and giving quinine in small doses internally. The finger and hand remained swollen for quite a fortnight after the injury, and close upon six weeks have elapsed, and the wound has only just healed. On the day following the sting an axillary gland became painful and enlarged, but subsided gradually as the symptoms of swelling in hand and finger lessened. During the whole course of the case the temperature was below normal.

Description of Trachinus Vipera.

This fish is about 4 to 6 in. in length, about the size and colour of a large sardine, with a rather broad head and the eyes close together. The black dorsal fin possesses three sharp, long spines. The operculum on each side has a sharp spine projecting backwards—the defensive and offensive weapon—and the chemist at Sassetot told me that zoologists have discovered a poisonous gland in the floor of the mouth, from which poison is ejected from under the gill simultaneously when the fish inflicts the wound. The fish are very good eating, either fried or boiled, but the fishermen cut off the heads immediately after catching

them, as the cooks decline to touch the fish unless the heads have been severed from the body. I read in Leuni's *Synopsis* that these fish were much feared by the ancients.

London, E.C. JOHN H. SPITZLY, L.R.C.P., M.R.C.S.Eng.

Reports
ON
MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF THE BRITISH EMPIRE.

ROYAL VICTORIA HOSPITAL, DOVER.

THREE CASES OF STRANGULATED EPIGASTRIC HERNIA.

[Reported by J. C. RIDGWAY, M.B., B.Ch., B.A.O., Trin. Coll., Dublin, House-Surgeon.]

As the occurrence of an epigastric hernia is somewhat rare, I venture to record the three following cases, which came under my notice during the past one and a half years, and which were operated on by Mr. C. E. Murphy, Visiting Surgeon to the Hospital, with whose permission I now publish them.

CASE I.

A. P., a labourer, aged 60, was admitted on March 11th, 1909, with the following signs and symptoms: He had a painful tumour situated in the epigastric region, and had had persistent vomiting for two days, no flatus or faeces being passed during that time; his temperature was 100.4° F. and the pulse 120 on admittance. In size the tumour was about that of a large turkey's egg, being situated in the middle line midway between the ensiform cartilage and the umbilicus. The skin over the tumour was normal. The tumour was tense and elastic to the touch, and gave no impulse on coughing. A rather interesting coincidence was that he had another tumour in his right groin, which was an old-standing inguinal hernia, and which on examination proved to be non-reducible. It had been present for about forty years, but had up to a year of his admittance to hospital been kept in place by the use of a truss. Then, however, he left off wearing it. An impulse on coughing was easily elicited, and it was plainly evident that the symptoms of strangulation were confined to the epigastric tumour.

A strangulated epigastric hernia being diagnosed, the following operation was performed. A vertical incision was made through the skin over the tumour extending for about 4 in. On opening the hernial sac, fluid blood-stained in colour escaped, in all about 1½ oz. A loop of transverse colon, measuring 3 in., was found very adherent to the sac; the bowel was purple in colour, but the peritoneal covering had not quite lost its lustre. It was found that the loop of intestine was tightly constricted by the neck of the sac. The neck was ½ in. in diameter. A director was passed through the constriction and the neck of the sac divided in a vertical direction upwards; the constriction then being relieved, the loop of intestine was drawn down into the wound and the point of constriction carefully examined. As the peritoneal covering above was intact, the bowel was carefully reduced into the abdomen again. The sac was then excised. The edges in the linea alba were freshened and the aperture then closed by interrupted silk sutures. In bringing the recti together the right was brought across the middle line and united to the anterior aspect of its fellow, thus forming a flap over the site of the previous hernia. The skin was then sewn up with salmon gut.

The patient was greatly relieved by the operation. Flatus being passed twenty-five hours later, and a normal action of the bowels occurring forty-six hours after leaving the table. Good progress was made until the morning of the fifteenth day, when he complained of feeling unwell, and stated that he felt pain in his right groin. On examination, the impulse which was clearly elicited before had now gone. His temperature, normal since operation, had risen to 99.8° and the pulse to 116. The skin was normal, but great pain was complained of on touching the tumour. As his condition became worse, it was decided to operate the same evening. On opening the sac, it was found to contain a mass of adherent omentum. This was transfixed, ligatured in two places, divided, the ligatured stump being reduced into the abdomen and the adherent omentum and sac removed, the abdominal wall being closed by a modified Bassini. He made a good recovery and left hospital on April 25th. When seen on July 6th last, he was in excellent health.

CASE II.

M. W., a woman aged 58, was admitted on August 8th, 1909. She related that she first noticed a lump in the epigastric region over thirty years ago, but, although it had latterly become larger, it had never given her any trouble until three days before being admitted, when, in endeavouring to move a heavy sideboard, she felt something give way in the site of the tumour. The same evening she vomited after taking her tea, and her symptoms becoming worse a doctor was called in, who advised immediate removal to hospital. When seen in the ward on admittance she was in a collapsed condition; vomiting had been constant for fifteen hours previous. A clammy sweat covered her face. The pulse was 134 and the temperature 97.8°. A tumour somewhat resembling a lipoma was seen situated in the middle line between the ensiform cartilage and the umbilicus, in size about that of a large Java orange. No impulse was felt when she coughed. The skin over the tumour was tense and of a darkened colour.

Immediate operation was decided on. On opening the sac, which contained very little fluid, three coils of small intestine were found closely matted together; these were freed from one another with great difficulty. It was doubtful whether the bowel should be excised, owing to its condition bordering on gangrene, but as the patient was in a collapsed state the constriction was relieved, and the bowel returned into the abdomen, the recti being brought together with two layers of Japanese silk and the wound closed, a Kocher drainage tube being inserted. Before leaving the table 1 pint of hot saline was injected into the rectum and retained. The patient came round from the anaesthetic, but three hours after signs of severe collapse set in. The pulse was 160 and the respirations 42. The foot of the bed was raised, the limbs bandaged, and saline injected into the axilla up to 1½ pints. Strychnine and digitalis being also given hypodermically. She gradually came round and made a satisfactory recovery. She left hospital on September 22nd, and was last seen in January, when she was attending as an out-patient with bronchitis, but unfortunately in April she contracted pneumonia, to which she succumbed.

CASE III.

H. F., a farm labourer, aged 66, was admitted on February 16th, 1910. For over forty years he had been in the habit of putting staves into the ground for netting rabbits by leaning on them and using his body as the driving force. He first noticed a swelling at a point about 2 in. above the umbilicus in the site of pressure about thirty years ago, but as it never troubled him he did not pay much attention to it. It had remained the same size for several years, namely, that of a hen's egg, but latterly he said that it had gradually become bigger. He stated that when in the act of sneezing he felt as if something had given way, and the same evening on endeavouring to lean on a stave, felt great pain in the tumour. On retiring to bed he examined the tumour and found it had become much larger. Next day he had increasing pain, and that evening vomited his food. His condition becoming worse a local doctor was called in and ordered his admittance to hospital, which, however, was delayed until the evening of the day following. His condition then was most serious. The pulse recorded 122, the temperature 100.2° F. The skin over the tumour was in an inflamed condition, being thin and upon the point of ulceration. The tumour itself was spherical in shape and 3 in. in its longest diameter. No impulse was present, and well marked signs of intestinal obstruction were in evidence. Immediate operation was performed. On opening the sac a loop of transverse colon 2½ in. in length and a mass of adherent omentum were found, the bowel was of a darkish colour, but the peritoneal covering retained its lustre. The omentum was exised, and the same proceeding followed as in Case I. His further progress was most satisfactory. He left hospital on March 12th. When seen in July, 1910, he was in good health.

In all three cases the skin was painted before and after operation with a 2 per cent. solution of iodine in rectified spirit; chloroform was the anaesthetic used.

THE Rural Housing and Sanitation Association was formed in 1902 for the purpose of improving the condition of housing and sanitation in country working class homes throughout England, so as to prevent the rural population from being driven into towns by the inadequacy and unwholesomeness of their habitations. It is sought to attain these objects by educating public opinion as to the need for reform, by advising as to the carrying out of the Public Health and Housing Acts, by inducing sanitary authorities to enforce remedial measures in specific instances brought to their notice, and in other ways. In the last annual report of the association it is urged that the public body administering the Public Health and Housing Acts in rural districts should be drawn from a wider area than is the case at present, and that there should be an improvement in the qualifications and the positions of rural health officers, for it is contended that the terms on which these officials hold their posts are not calculated to encourage them in the efficient performance of their duties. At the foot of page 7 of the report there is displayed a singular want of knowledge of the duties of a county medical officer of health, who is referred to as an official who supervises the carrying out of the Public Health and Housing Acts in rural districts. The carrying out of these Acts is still in the hands of the district councils, whose executive officers are the district medical officers of health.

British Medical Association.

CLINICAL AND SCIENTIFIC PROCEEDINGS.

METROPOLITAN COUNTIES BRANCH: HAMPSTEAD DIVISION.

Friday, December 9th, 1910.

J. FORD ANDERSON, M.D., in the Chair.

Practical Value of Vaccine-therapy.

DR. J. C. BRISCOE read a paper on the practical value of vaccine-therapy. He said it was but a short time since the discussion on this subject was held at the Royal Society of Medicine, at which many and various opinions were expressed on different points, but the general consensus of opinion was favourable to the good effects produced by vaccination in general. On the whole, far more successes than failures were recorded. As they were no doubt quite familiar with this discussion, he thought it would be advisable to leave out, as far as possible, the opinions of other people and to put forward his own ideas on the subject, and to give shortly, without minute detail, some of the results, favourable or otherwise, which had followed this method of treatment in his hands. If properly carried out, vaccination offered the greatest hopes of success in the treatment of disease. These hopes, however, were not always fulfilled, and he proposed, in the first place, to inquire into the reason why the results did not always correspond to theoretical expectations. In his opinion, recovery from an infection depended largely on the patient's power of resistance, and in employing vaccination it was essential to support this treatment with all the auxiliary measures which would tend to raise the resistance. The vaccination should be regarded as an adjuvant to the older and tried methods. As an example he instanced tuberculosis, in which he advocated fresh air, proper dietary, and well controlled exercise. He recognized that this doctrine might possibly detract from the prestige of vaccination, but that could not be helped. In the next place, it was essential to employ local treatment together with vaccination. The neglect of this was often responsible for failure. It would be unwise and tantamount to courting failure to inject a vaccine for boils, without either opening the boils or aspirating them. He placed considerable value on local treatment by cupping and by the production of hyperaemia. In the third place, the success of the vaccine treatment depended to a certain degree on the extent of the infected focus. It might be stated that the success to be gained would stand in inverse proportion to the size of the lesion. The fourth point was persistence of irritation. He was strongly of opinion that a vaccine applied to a case in which an irritant was allowed to remain could not but fail. Pus acted as an irritant, and should therefore be removed before the vaccination was performed, and he was convinced that many failures of vaccine treatment for urinary infections were due to the fact that calculi were present in the kidney. The speaker then passed on to the consideration of the causes of failure associated with the condition of the blood. Blood which was too viscid and which clotted too rapidly could not gain access to the infected focus. The effect of citric acid in lowering the coagulability of blood demonstrated the truth of this view. He explained the popular belief that hot lemonade "cut the phlegm" in bronchitis as due to this fact. On the other hand, he believed that there were many persons in whom the vaccine treatment did not produce the desired effect on account of the fact that their blood did not coagulate readily enough. It was also necessary to consider the distance to which the body fluids could penetrate into diseased tissues. The speaker had, together with Mr. Cheatle, experimented in this direction. They had attempted to ascertain how far the body fluids penetrated into a preformed abscess. They found that only the outermost surface was so penetrated. He had also performed experiments to show that there was a considerable difference between the plasma and the serum derived from clotted blood in regard to the immune substance content. A heart, removed after ligature of the vessels, containing unclotted blood, was injected with cocci. The same proportion of cocci were mixed with equivalent volumes of serum and blood corpuscles. Both the heart and the serum mixture were incubated for a measured period, and it was then found that many times as many cocci were taken up by the leucocytes in the serum mixture as by the leucocytes in the fluid heart blood. If, however, the cocci were first sensitized with serum from coagulated blood, the power of phagocytosis of the leucocytes in the heart was almost as high as that of the leucocytes in the serum mixture. A further experiment which confirmed this was also given. Four rabbits were taken. Two were bled to the extent of 10 c.cm. of blood, while the other two were not bled. On the following day each received a fatal dose of staphylococci through a vein of the ear, and the first received an intravenous injection of 6 c.cm. of its own serum as well, the second only 6 c.cm. of saline solution, the third an injection of 6 c.cm. of the serum of the second rabbit, and the fourth, which had not been bled, an injection of 6 c.cm. of saline solution. Death occurred on the tenth day in the first, after twenty-four hours in the second, and on the sixth day in the fourth, while the third rabbit recovered. This, he urged, proved that the serum acted by delaying or preventing death after the introduction of a fatal dose of the cocci. Clinically, a similar state of affairs could be observed. In malignant endocarditis it was possible to raise the opsonic index by vaccines without improving the patient's condition. This he interpreted as follows: The circulating plasma contained the immune substances in an inactive condition, and in order to render them active it was necessary for the blood to come into contact with the necrotic areas of a localized focus, in order that clotting might take place. Theoretically these cases should be treated by vaccines combined with a local bleeding and reinjection of the serum from the removed blood after clotting. He had not had an opportunity of carrying this out. Dr. Briscoe then turned to the clinical side of the treatment. First he dealt with staphylococcic affections. Boils treated by vaccines yielded most excellent results. Even better results were obtained in cases of ulceration due to staphylococci. He instanced the case of a nurse who had an ulcerating sore on the hand. The ulcer healed under vaccine treatment alone in three days, but the affected glands remained large and suppurated. As soon as the pus was evacuated by aspiration the whole infection cleared up rapidly. The absence of drainage prevented the immune substances from completing its work in the closed area. In a similar manner good results were obtainable in unresolved bronchitis, infections of the urinary tract due to *B. coli communis*, sinuses, unless surrounded by a dense fibrous wall, and nasal discharges. In pulmonary affections, bronchial catarrhs, either associated with asthma or not, vaccines often yielded satisfactory results. Dr. Briscoe spoke of a case of bronchitis associated with periodic attacks of dyspnoea. In this case there was marked eosinophilia. The vaccine, prepared from a diplococcus isolated from the case, resulted in the removal of the dyspnoea attacks. The eosinophilia persisted. No effect on the blood eosinophilia was produced by the local treatment of an existing nasal obstruction. Later a quinsy developed, and the tonsils were removed, and the eosinophilia diminished from 19·5 per cent. to 13 per cent. in two weeks. Good results were also obtained in some cases of bronchopneumonia, provided that the condition was not very acute. The vaccine could be made from the micro-organisms isolated from the sputum or from the material gained by paracentesis. Some very remarkable results have been reported even in desperate cases. Dr. Wilcox was the first to employ the pneumococcus vaccine for acute pneumonia. The speaker had not used it. Empyema did not as a rule benefit by vaccines. Unless the pus was let out it was useless to apply a vaccine. If the empyema was due to the pneumococcus, recovery usually took place under the older form of treatment. Infective processes of the urinary tract which might be treated by vaccines fell into two classes: (1) bacilluria in which there was no appreciable pus, and in which there was no localized focus; (2) infections with a local focus in the urinary organs. Of the first, the best results obtained were those which were dependent on an infection caused

by *Bacillus coli communis*. In these cases, however, he strongly urged giving intestinal disinfectants, such as creosote, guaiacol, calomel, etc., by the mouth, or antiseptics per rectum, and urotropine or one of its derivatives to disinfect the urinary tract. Harm might be done in some cases by vaccine, by inducing the "vaccine habit," since the general symptoms were often relieved without any real objective improvement, and a secondary nephritis might arise. In the second class of case, the most common form was that of a stitch abscess due to *B. coli* or gonococcus. The results, however, varied in these cases. The speaker stated that subacute rheumatoid arthritis cases were among the most satisfactory for vaccine treatment. In certain cases due to oral, nasal, or other septic affections, vaccines acted like a charm. The pain disappeared at once, and the swelling within a short time. He then related the history of a case illustrative of joint affections due to *B. coli* infection, in which the vaccine treatment failed, even when associated with massage, strapping, Bier's hyperaemia, and the application of Scott's dressing. After aspiration of the joint, cure followed. Passing over primary infections of the cutaneous system, and the mouth, he concluded by a consideration of the vaccine treatment of pulmonary tuberculosis. If the lesion was large, he found that the treatment would not be productive of good in the majority of cases. Men reacted better than women. Vaccine did not stop haemorrhage, but in such cases tended to increase the liability to it. Secondary infections disappeared with open air and creosote inhalations. He again emphasized the necessity of employing every means of raising the resistance of the patient as well.

Dr. WHITFIELD, who was next called upon to address the meeting, fully endorsed what Dr. Briscoe had said about irritants. He illustrated this point by referring to that resistant form of boil which affected men much more commonly than women, and which caused much difficulty in treatment. In inquiring why men were affected and not women, he found that the only contributory cause which he could discover was the fact that men often either had the napes of their neck shaved at more or less long intervals, or had an instrument called the "clippers" applied to this situation. The result was that short, stiff hairs grew, which rubbed against the collar and acted as irritants. Women, also, wore collars, at times starched and dressed with irritants, like men, or septic soft cloth collars, yet they did not suffer in the same way. The difference lay in the fact that they wore their hair long. By attending to this point, vaccines proved more beneficial than if it were neglected. He was pleased to find that Dr. Briscoe had spoken of "vaccine-therapy," and not "opsonin-therapy." The former meant vaccine treatment carried out in any way that might be desired, while the latter meant vaccine treatment controlled by the opsonic index. He had opsonized every one of his lupus patients for the course of three years, and the results were so unsatisfactory that at the end of this time he had no more patients to opsonize. Nodules did not disappear when vaccines were applied in this way. Since then he had tried with some fear another form of treatment and had obtained highly satisfactory results. This was injecting Koch's Old Tuberculin. Great care was necessary, since Old Tuberculin was slightly dangerous. Even in the early days of Old Tuberculin, some very marvellous results were obtained. Old Tuberculin, however, made the patient very ill. The opsonic index did not agree with the results obtained by this means of treatment. He started with $\frac{1}{4000}$ c.cm., and either repeated the same dose or doubled it, according to the clinical manifestations. He cited a case treated in this manner some eighteen months ago, in which a very extensive lupus of the nose resolved completely. Breathing had become satisfactory, all the nodules had disappeared and had been replaced by innumerable depressed scars, while the interior of the nose had become considerably atrophied. Dr. Whitfield passed to the consideration of the necessity of examining the lesions microscopically when possible in each case before applying a vaccine. He instanced cases of mistakes in this direction. Scabies, ringworm, and iodine acne had been treated with streptococcic vaccines with negative results. The two former would be readily dealt with properly if a microscopical examination had preceded the treatment.

Mr. KENNETH GOADBY objected to the term "opsonic-treatment" because the opsonic index was only one method of controlling the treatment. Vaccine-therapy, the term adopted by the Royal Society of Medicine, was preferable. In applying himself to his own subject, he stated that he agreed with Dr. Briscoe that oral infections were frequently the causes of arthritic affections. He considered local and general treatment in association with vaccines as highly important. The group of affections usually spoken of as pyorrhoea alveolaris (this was not one disease but a number of bacterial entities) were often treated promiscuously by scaling deeply down the teeth with instruments which the dental surgeon might or might not sterilize beforehand. It was essential to raise the resistance of the patient prior to surgical procedure of this sort. In speaking of the extraction of teeth for infective processes, he strongly deprecated the practice of extracting as many as possible in one sitting. The production of local immune bodies was of the utmost importance for the welfare of the patient. He held that preliminary microscopical examination of the pus or other material was absolutely necessary in order to ascertain what bacteria were present before making vaccines. He added a few words with regard to the application of vaccines by the mouth.

Dr. BUTLER HARRIS stated that he was a general practitioner who five years ago had started a bacteriological laboratory, and strongly advised other practitioners to do the same. He maintained that at least 20 per cent. of the cases which the general practitioner was called upon to treat were caused by an infecting organism. Since vaccine treatment had come to stay, it was essential that every practitioner should examine the material of each case under the microscope in order to ascertain what was present in the case. He claimed to have been the first to apply vaccine-therapy in cases of acute pneumonia. He cited cases. The effect of the injection of a vaccine prepared from Fraenkel's pneumococcus was a fall of temperature followed by a rise after about thirty-six hours. If the injections were repeated several times the temperature fell ultimately by lysis. Pneumonia which did not resolve properly might be cured by injections. In the acute cases he advocated the early employment of a stock vaccine prepared from a highly virulent strain, to be followed by an autogenous vaccine as soon as possible. It was naturally important to distinguish cases of pneumonia due to Friedländer's bacillus from those caused by the pneumococcus. He also reported good results obtained in *coli* infections of the urinary tract, and spoke of a trial which he was making with vaccine of *coli* in a pregnant woman who previously habitually miscarried, and in whose urine and uterine scrapings *coli* had been isolated.

Dr. CLAUDE TAYLOR asked whether in the case cited by Dr. Briscoe the tonsils were guillotined or enucleated. He spoke of a case of septic endocarditis and malignant aneurysm.

Dr. FORD ANDERSON regretted there was no time to review the proceedings. He supported Dr. Briscoe in his statement that rheumatoid arthritis cases were benefited by vaccine. He asked whether Bier's hyperaemia method was not highly valuable as an adjunct. He also asked for his opinion as to whether in cases of acute pneumonia stock vaccines like those supplied by the Lister Institute could be recommended when there was no time to obtain an autogenous vaccine. He had placed a number of such stock vaccines on the table for members to examine.

In his reply Dr. BRISCOE said that the tonsils referred to were enucleated. He, too, was heartily glad that it was proved that it was no longer necessary to work out the opsonic index in vaccine work in order to get successful results. He apologized for having been ignorant of the fact that Dr. Butler Harris had been the first to use pneumococcic vaccines in the treatment of pneumonia. He considered that Bier's treatment produced stasis and allowed the plasma to produce the alteration mentioned before and discharge active immune bodies.

After the reply had been given, Dr. BRISCOE and Mr. GOADBY exhibited on the screen some very excellent photomicrographs of some organisms which play a part in producing infections.

At the motion of Dr. MACEVOY, a hearty vote of thanks was passed to Dr. Briscoe and the other speakers.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, December 12th, 1910.

Mr. CHARTERS J. SYMONDS, President, in the Chair.

Fröhlich's Syndrome.

DR. DAVID FERRIER, in a paper on acromegaly, said this disease was supposed by Marie to be due to hypopituitarism—that is, absent or diminished secretion of the gland, analogous to the myxoedema and cretinism associated with a similar state of the thyroid. That view seemed to harmonize with the frequently destructive nature of the neoplasms which were found *post mortem*. On the other hand, some investigators, and especially Tamburini, contended that the disease was due to the opposite condition—namely, hyperpituitarism, especially of the anterior lobe. That view, which seemed to the speaker preferable, was supported by the fact that the administration of pituitary extracts in acromegaly tended rather to increase than to alleviate the symptoms. There had, however, been many cases of tumour of the pituitary body in which there had been neither acromegaly nor giantism. Frankl Hochwart referred to over 160 such cases at the last meeting of the International Medical Congress. In those cases the symptoms of cerebral tumour, localized posterior to the optic chiasma, were in general more pronounced than in acromegaly. Headache and sickness were common, and signs of mental alteration similar to those occurring in connexion with the disease of the frontal lobes had been frequently observed. A great tendency to somnolence was also the rule. Bitemporal hemianopsy was pathognomonic. Sometimes there was complete blindness in one eye and temporal hemianopsy in the other. Occasionally also there were various forms of oculo-motor paralysis. Optic neuritis was rare. More often there was primary optic atrophy. But in addition to those symptoms, indicative of localized tumour in the sella turcica, there had been observed a remarkable tendency to the deposition of fat, with defective sexual power, hypoplasia of the generative glands, absence of sexual hair, and the general characters of eunuchism. The condition had been termed dystrophia adiposa genitalis, or Fröhlich's syndrome. Those cases were not infrequently associated with polyuria, polydipsia, and glycosuria. They often ran a rapid course. Almost every kind of neoplasm had been found after death, either in the hypophysis, or invading it. Several cases had recently been reported of successful removal of pituitary tumours associated with Fröhlich's syndrome, with remarkable improvement, not only in respect of the general tumour symptoms, but also of the dystrophy. The difficulty of explaining all the symptoms by a simple hypoactivity or hyperactivity of the pituitary gland had led many pathologists to see in the phenomena of acromegaly and allied affections indications not merely of a local affection of the pituitary but of a widespread disturbance of equilibrium of the system of internal secretory organs, all closely bound up with each other—a so-called multiglandular syndrome. There were many facts which favoured that hypothesis. It had been shown by Rogowitsch that the pituitary gland underwent hypertrophy after removal of the thyroid; and it had been shown by the experiments of Cushing and the surgical operations of Hochenegg that the thyroid underwent hypertrophy after removal of the pituitary.

THE ROYAL SOCIETY.

Thursday, November 17th, 1910.

Sir ARCHIBALD GEIKIE, K.C.B., President.

A New Method for the Differentiation of Bacteria.

LEONARD S. DUDGEON, P. N. PANTON, and H. A. F. WILSON presented a second report on the influence of bacterial endotoxins on phagocytosis. They had failed to demonstrate an action of the endotoxic substances on the leucocytes, and experiments leading to similar results were obtained by allowing bacteria to be exposed to the action of the specific endotoxic substances. The results published in their first communication, that the phagocytic result was dependent upon the interaction of endotoxin of serum, were confirmed. In the case of normal serum, the amount of phagocytosis permitted when bacteria and endotoxin interact was not related to the amount of haemolytic complement present. The action of endotoxin appeared to be specific even with bacteria so closely related as the typhoid and paratyphoid family. These results strongly suggested that this method could be employed for the differentiation of bacteria. The amount of endotoxin had been shown to be strongly thermo-stable.

Isolation and Cultivation of the Lepra Bacillus.

Dr. F. W. TWORT described experiments undertaken to obtain a method whereby the lepra bacillus of man and allied bacilli might be cultivated outside the body on artificial media. The material tested was obtained from a typical leper. Cultivations made on ordinary laboratory media and on media containing extracts from animal organs and tissues gave negative results. In view of the close relationship between the tubercle bacillus and the lepra bacillus, it appeared highly probable that these two micro-organisms would require the same chemical substances for building up their protoplasm, which could be elaborated from the ordinary media only by the tubercle bacillus. It was thought that if these substances could be supplied already formed to the lepra bacillus it might grow, and the easiest method of supplying these substances would be by adding to some good medium the ground-up bodies of the tubercle bacilli containing them; accordingly a medium was made as follows: Egg three parts, 0.8 per cent. sodium chloride one part, ground tubercle bacilli 1 per cent, and glycerine 5 per cent. or less, mixed, placed in tubes, sterilized, and set in slopes. Leprosy material was placed in 2 per cent. ericolin to kill contaminating micro-organisms, and then inoculated on the tubercle medium. On this the lepra bacillus grew very slowly as a delicate colourless streak along the inoculated track, and showed the typical morphological and staining characters of the lepra bacillus; the bacillus could be sub-cultured only on the tubercle medium. Experiments would be made to prepare a lepra vaccine and to grow the lepra bacillus of rat. In conjunction with Mr. Ingram the speaker had also succeeded in growing the bacillus found in Jöhne's disease of cows. It grows on the same medium, much like lepra bacillus, but somewhat faster.

ROYAL SOCIETY OF MEDICINE.

SECTION OF ANAESTHETICS.

Friday, December 2nd, 1910.

Dr. MCCARDIE, President, in the Chair.

Hypnotism in Relation to Surgical Anaesthesia.

DR. EDWIN ASH, in a paper on hypnotism in relation to surgical anaesthesia, said that the work of Dr. Esdaile, who served the old East India Company, formed a starting point from which to consider scientific work in this connexion. It was well known that he performed hundreds of operations on patients in the state of hypnosis in India. No one else had ever been able to repeat his results. When a deep stage of hypnosis was obtained it afforded the condition of an ideal anaesthesia, with no disagreeable preliminaries and no possible serious after-effects. But the difficulty was that the requisite state could only be induced in comparatively few people—roughly about one in ten or twelve. The theory of the process was obscure. Probably it was largely owing to concentration of the attention on some particular object or idea in the hypnotic state that consciousness to painful stimuli was lost. Owing to the uncertainties attaching to its use, hypnotism could not be considered applicable to ordinary cases. In the case, however, of patients for whom a general anaesthetic was undesirable, there was no reason why their suitability as subjects for hypnotic suggestion should not be tested some days before the date fixed for an operation. In addition there was a great field for the use of simple suggestion as an aid to anaesthetists. An arrangement by which a nervous patient about to be operated on could receive the benefits of "suggestion" for some time before the operation would unquestionably result in the anaesthetic being taken very much more satisfactorily

than might otherwise be the case, and the advantages to the surgeon both during the operation and in the light of after results would probably also be great. Dr. LLOYD TUCKEY instanced an anaesthetist at a dental hospital who became very successful in gauging the susceptibility of persons to suggestion from their appearance, and could often produce anaesthesia in favourable cases by using an empty gas bag. Dentists had told him also that Christian Scientists could often stand the extraction of teeth without apparently feeling any pain. He considered that a "burly policeman" represented a type favourable to hypnosis. Dr. NATHAN had found that the people who came to him to be hypnotized fell largely into two groups: first, highly neurotic individuals, for whom hypnotism was a last resource, and secondly, persons who looked on it more or less as a joke. Neither of these groups represented favourable subjects. On one occasion, when giving a demonstration on hypnotism, he had 7 men from an institute for retired soldiers on whom to demonstrate. All 7 were readily hypnotized. He considered that it was difficult to gauge accurately the degree of anaesthesia in a hypnotized person. A patient who had not responded to a pin prick might shout out at an incision. Dr. WINGFIELD said there were many curious and interesting points about hypnotic anaesthesia; general anaesthesia might be obtained or, when desired, one limb only might be rendered anaesthetic, rigidity appearing first and being followed by anaesthesia. A patient might be at the same time anaesthetic and hyperaesthetic in the same part; for instance, any downward touch on a limb might be unfelt, but the slightest upward touch be felt acutely. Dr. ASH, in reply to the PRESIDENT and Mrs. DICKINSON BERRY, said he thought it might be said the more suggestion the less chloroform. After-effects, due to toxic absorption, would not be affected by suggestion. Confidence in the result to be obtained on the part of the hypnotizer was certainly a factor in success, but beyond that he thought the hypnotizer was unimportant. Black races were, as a rule, much more susceptible than white.

SECTION OF OBSTETRICS.

Thursday, December 1st, 1910.

Dr. MACNAUGHTON JONES in the Chair.

Uterine Cancer.

DR. ARCHIBALD LEITCH, in a paper on the pathological bases of operations for cancer of the uterus, said that as it was impossible to determine from clinical or histological examination the exact extent of cancerous disease in any given case, it was justifiable to conclude that the only way of obtaining a radical extirpation of the disease was to apply to every case of cancer of the uterus a technique which was designed for the most advanced. Statistics had shown that 55 per cent. of cases were free from visceral or glandular metastases at the time of death, but these figures only applied to dissemination outside the pelvic cavity. Three lymphatic tracts were described: (1) To the interiliac glands; (2) to glands along branches of the internal iliac artery; (3) to pararectal glands. The last set were very rarely affected, in spite of the supposed frequency of invasion of the utero-sacral ligaments. The interiliac glands were the most important, and were in communication with another set on the outside of the common iliac artery. Both sets should be removed when there was evidence of glandular infection. Along the course of the ureter, through the broad ligament, lymphatic infection of the cellular tissue occurred, and by fibrotic contraction, as well as by direct invasion of its walls, the ureter became constricted, and hydronephrosis ensued in no less than 75 per cent. of all cases. Invasion of the vagina by cancer of the cervix occurred in all but 2·5 per cent. of cases; this was explained by the rich anastomosis of lymphatics between the cervix and upper segment of vagina. Thus the excision of a wide cuff of vagina in Wertheim's operation removed a highly dangerous tissue. The bladder was involved in two-thirds of *post-mortem* cases, and the rectum in one quarter of the cases; while vesical perforation occurred in 44 per cent., and rectal perforation in 16 per cent. of cases. Free and timely removal of the upper segment of the vagina prevented the occurrence of these distressing and hopeless sequelae.

Wertheim's Operation.

Mr. CHILDE, in a paper based on twenty-three Wertheim operations performed by himself, reached the conclusion that this method was superior to vaginal hysterectomy in every particular for the following reasons: (1) It was exploratory in the first instance, and enabled the surgeon, after opening the abdomen, to decide with accuracy whether the case was suitable for radical treatment or not; (2) in cases comparable with vaginal hysterectomy its primary mortality was just as low; (3) it was a more scientific operation than vaginal hysterectomy, which was a shot in the dark; (4) it was on all-fours with the more extensive operations for cancer elsewhere, which had been performed of late years, and which had given infinitely better results than the old partial operations; (5) there was evidence to show that it did give better results than vaginal hysterectomy; (6) if infected glands were present in early cases (though this was exceptional), it permitted of their removal; (7) it increased the percentage operability, and enabled more advanced cases to be dealt with. This he considered the least of its advantages. It was in the early cases that the good results were to be expected.

SECTION OF LARYNGOLOGY.

Friday, December 2nd, 1910.

Dr. WATSON WILLIAMS, President, in the Chair.

THE following were among the exhibits:—MR. HERBERT TILLEY: An instrument he had found useful in the removal of nasal spines in the operation of submucous resection of the septum. Dr. H. J. DAVIS: (1) A case of *Leprosy* under treatment by subcutaneous injections of nastin B; (2) a *Thyro-lingual cyst* and a patient who had recovered after operation for acute sphenoidal sinusitis; (3) a boy aged 7 who had suffered from empyema of the maxillary antrum, thought by some members to be due to osteomyelitis of the upper jaw. Mr. CHARLES A. PARKER: *Tonsillith* of very large size successfully removed by traction with forceps. Dr. ADOLPH BRONNER: A pedunculated fibroma of the posterior pillar of fauces. Dr. KELSON: A case of lupus of the larynx in a woman aged 36; treatment by cautery had been only partially successful, and the exhibitor proposed to try tuberculin and to show the case again later on. Mr. J. GAY FRENCH: A case of stricture of the lower end of the oesophagus which he considered spasmodic. Some other members, however, were inclined to deny the existence of spasmodic stricture at all. Mr. SOMERVILLE HASTINGS: A case of early *Myasthenia gravis* with laryngeal symptoms; the patient was unable to whistle or close his eyes, but was improving. Dr. E. A. PETERS: Cases showing very good results following the removal of *Singers' nodules* from the cords by means of the galvano-cautery. Mr. CYRIL HORSFORD: A case of *Laryngeal tuberculosis* apparently cured by amputation of the epiglottis and followed by application of pure carbolic acid. Dr. WILLIAM HILL: A case of *Carcinoma of the oesophagus* in which very great improvement and possibly temporary cure had been obtained by radium treatment. In the course of the evening Dr. SCANES-SPICER gave a demonstration illustrating his views on the connexion between faulty postures and mode of breathing and laryngeal cancer.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Friday, December 9th, 1910.

Dr. J. F. J. SYKES, Vice-President, in the Chair.

Municipal Control of Pulmonary Tuberculosis.

DR. WILLIAM ROBERTSON (Leith) said that it was now generally conceded that every sanitary authority should adopt some scheme for dealing with phthisis. Voluntary notification had been in force in Leith since 1904, and power to impose compulsory notification could now be obtained in Scotland, provided the authority satisfied the Local Government Board that active steps would be taken to supplement notification. While approving generally of the Sheffield notification clauses, the speaker advocated an additional provision requiring removal of cases which the medical officer of health considered were unsuitably housed or where there was no adoption by the patient of the precautions advised. The original twelve beds in the

Leith Hospital had now been increased to twenty. Advanced cases were not received. All the patients were made to do light work. Occasionally contacts had been taken to the hospital from a house where there was a patient in an advanced stage of the disease. The pale-faced children of consumptive parents were those selected for residence in the open air ward. The patient might die soon, but the children had a decidedly good opportunity afforded them to gain in tone and bodily resistance. Periodical visitation of the house after the return of the contacts ensured the continuance of the open air principles. Dr. SIDNEY DAVIES advocated compulsory notification, but considered it should not be insisted on too rigorously. Drs. SANDILANDS and DUDFIELD urged the importance of providing tuberculosis dispensaries. Dr. E. H. T. NASH agreed that sanitoriums were important, but considered that tuberculin treatment should be carried out in them. Dr. W. BUTLER dealt with the importance of improving the sanitary surroundings of the people, and Dr. A. H. BYGOTT pointed out that the boards of guardians never supervised the sanitary conditions of those persons to whom outdoor relief was granted. Dr. CAMAC WILKINSON gave an account of the work he was carrying out at the Kennington Road Dispensary with tuberculin.

LIVERPOOL MEDICAL INSTITUTION.

Thursday, December 1st, 1910.

Dr. T. R. BRADSHAW, President, in the Chair.

The Pathogeny of Eclampsia.

Dr. LEITH MURRAY, in a paper on some points in the pathogeny of eclampsia, said that his investigations led him to believe that the toxin was one containing cytolytic, haemagglutinative, and endothelilytic elements, and pointed out how a polymorphism of the lesion was produced by interaction of these. He admitted a difficulty in deciding to what extent the lesions in the central nervous system were due to direct intoxication or to vascular disturbances. The effects on the circulation produced by snake poisoning presented an extraordinary similarity in type to those of eclampsia. Burgers had lately demonstrated the presence in maternal serum of a cobra-haemolysin-inhibiting factor. The speaker had confirmed this observation in several cases, and had found the factor absent in a case of eclampsia. He was still investigating the point, and meantime suggested Calmette's antivenin might well be tried in eclampsia, the injections being given subcutaneously in the pre-eclamptic stage and intravenously in the eclamptic stage. The PRESIDENT thought that an appropriate serum might be found for puerperal eclampsia, but doubted whether antivenin was likely to be useful. The various venoms were much more closely related to each other than any of them were to the toxins causing eclampsia, and yet these antiserums were practically useless against any but their own particular venom. The action of venom neurotoxin was always paralytic, and that of eclampsia was for the most part convulsivant. Dr. BLAIR BELL said that there was little doubt that whatever the primary cause of eclampsia was, the ultimate results in fatal cases were due to the establishment of a secondary vicious circle whereby the changes in the liver led to intoxication of the patient by the products of its disintegration. He did not think it likely that antivenin would prove specific, but he was much impressed by Dr. Murray's interesting arguments in favour of the serum.

Exhibits.

Among the specimens demonstrated was one of cerebral haemorrhage associated with granular kidneys and hypertrophied heart in a girl of 20; she had suffered from headache for a year. Also a specimen of haemorrhage into the left lateral lobe of the cerebellum, in which there was no paralysis, contracted pupils, and a temperature of 105°; the pons was normal, there was no blood in the fourth ventricle. The specimens were shown by the President, Dr. BRADSHAW, who said there had only been one case of cerebellum haemorrhage in the records of 1,800 *post-mortem* examinations at the infirmary in fourteen years.

WEST LONDON MEDICO-CHIURGICAL SOCIETY.

Friday, December 2nd, 1910.

Dr. PHINEAS S. ABRAHAM, President, in the Chair.

"606."

MR. J. E. R. MCDONAGH, in a paper on practical experience with Ehrlich's new specific for syphilis, indicated that the name "606" had been chosen by Ehrlich because it was the 606th preparation chemically prepared and biologically and therapeutically tested. As atoxyl and arsacetin produced amaurosis it was feared that "606" might do the same, but since more than 20,000 injections had been given without this occurring, and since the drug seldom gave rise to toxic symptoms, its general employment had been considered absolutely safe. The route first chosen was intramuscular, but the intravenous method was without doubt preferable. The patient suffered only a slight inconvenience in the form of a rigor or two and vomiting a few hours after the injection, compared with the severe pain which the intramuscular injection might cause. Of still greater importance was the fact that the organisms were killed forthwith, whilst with an intramuscular injection the absorption was slow, and some of the arsenic might become encapsuled, thereby increasing the risk of a second injection, should such be necessary. The best plan was to give an intravenous injection, and if the symptoms showed no marked improvement by the end of the third day, to give an intramuscular injection. On the other hand, if the lesions improved one should wait for about four weeks, and be guided by a Wassermann reaction as to whether a second injection (intramuscular) was necessary. For the intravenous injection 3 to 6 grams of the powder should be dissolved in 100 c.cm. of warm distilled water and 10 to 15 c.cm. of $\frac{N}{5}$ sodium hydrate added until a clear solution was formed, the bulk being finally made up to 250 c.cm. with distilled water. In cases of sleeping sickness, tubercular forms of leprosy and leukaemia, psoriasis, and lichen planus, "606" had exerted some beneficial action; and other infections superadded on syphilis, such as tubercle, streptococci and staphylococci, had often been markedly improved. A number of cases in point were shown. One case of tabes was cited in which the Argyll Robertson pupil had disappeared and the knee-jerks returned. Seventeen cases of tabes had been injected, but only three improved insomuch as the lightning pains had disappeared. Cases of general paralysis of the insane before degeneration had commenced improved considerably. Chronic superficial glossitis, which hardly ever responded to mercury, had greatly benefited by "606." In all the speaker had treated 130 cases, 3 of which had recurred, 2 of these being cured by a second injection, and only 5 did not respond to "606."

NORTHERN ASSOCIATION OF MEDICAL WOMEN.

AT a meeting in Liverpool on December 6th Miss IVENS, M.S., analysed 23 consecutive cases of operation for *Uterine fibroids*. In all the abdominal route had been selected. In 8 panhysterectomy, in 11 supravaginal hysterectomy, and in 4 myomectomy, had been chosen as the needs of the individual case indicated. Except in patients past the menopause an attempt was made to leave one ovary. Among the series were 3 cervical tumours and 1 subperitoneal tumour of an adenomyomatous nature, characterized by dense adhesions. The commonest complication was salpingo-oöphoritis, of which one was tuberculous, another haemorrhagic. The ovaries were frequently cystic; 2 cases were associated with ectopic pregnancy and 1 with carcinoma of the cervix. In one tumour necrobiosis had occurred, in another calcification of a subperitoneal tumour which was causing rectal pressure symptoms. Fifty per cent. of the married patients were sterile and 2 had had only one child. All the cases terminated favourably and healed by primary union. Statistics were quoted showing that it was more dangerous to leave a fibroid than to remove it, unless there was some definite contraindication.

Reviews.

DIET AND DIGESTION.

THE latest fasiculus we have received of Professor ALBU'S Encyclopaedia of Diseases of Digestion and Metabolism[1] is that on the Dietetic Treatment of Gout, by Professor SCHITTENHELM of Erlangen and Dr. J. SCHMID of Breslau. Of the thirty-six pages of text twenty are devoted to a discussion of modern theories of gout and an account of the recent researches upon which they are based. This is written clearly, and is an excellent introduction to the second part devoted to dietetic treatment. The authors fully accept the nuclein origin of uric acid, although they concede that a small portion may have another source, such as, for example, the histidin of albumen. They say it is not known what the human being does with his uric acid, but 50 per cent. of it appears in the urine. Uric acid is always present in the blood of gouty persons even after months of abstinence from purin food, but in the non-gouty it is found only after the ingestion of food containing a large amount of purins, such as sweetbread. Uricaemia occurs in chronic nephritis when the kidneys are failing, also in pneumonia and in splenic leukaemia. They ask whether this uricaemia is due to retention or to over-production. In chronic gout the excretion of uric acid is below that of normal persons, a fact which points to the former explanation. There is a renal gout caused by kidney disease or defect, but gout may occur in persons with quite healthy kidneys. The true explanation seems to be that there is a retardation of the destructive processes of uric acid in the body, for which view there is experimental evidence, the addition of purin bases to the diet of a gouty person causing a fall in the uric acid excretion. Uric acid gives rise to three kinds of disorder: (1) that of metabolic gout with constant marked uricaemia and slow destruction of purin uric acid; (2) renal gout with variable uricaemia apparently dependent upon the activity of the renal function; this condition includes the gout due to lead poisoning; and (3) uric acid lithiasis, or the formation of uric acid stones in the kidney or bladder, a condition which gives rise ultimately to chronic nephritis. The dietetic treatment they recommend is the adoption of purin-free diet, and in addition they counsel abstinence from alcohol, as experiment and experience alike show that its use interferes with the destruction of nuclein. They give a table of the purin contents of different articles of diet, but practically it comes to the elimination of all kinds of animal food with the exception of eggs, cheese, butter, and milk, with abstinence from tea, coffee, and cocoa, and the prohibition of alcohol. In chronic gout they suggest that an attempt should be made to determine, by a sort of test-diet, the patient's tolerance for certain articles of animal food, those containing small amounts of purins being allowed, for which purpose the table of purin values is useful. They point out the extreme difficulty of dieting complicated cases of gout, in which diabetes and obesity are present, and profess their inability to lay down rules for them as each case must be dealt with individually. Furthermore, while recognizing that there may be cases in which it would be advisable to carry out a preventive treatment by inducing a patient with a marked hereditary predisposition to adopt a modified vegetarianism, they do not formulate any definite rule on the subject.

The short monograph on the uses and application of hydrotherapy in the diseases of digestion and metabolism, by Dr. ERNST TOBIAS of Berlin, is a chapter of Professor ALBU'S Encyclopaedia of Diseases of Digestion and Metabolism.[2] Dr. Tobias says in his introduction that during the last two decades hydrotherapy has made great strides, but it will only secure the confidence of the profession if its limitations are recognized. Water will not cure everything, and the method is nothing more than a more or less general factor in the sphere of physical therapeutics. He has endeavoured to describe its use and application from the standpoint of the practitioner, and to distinguish where and in what respect it is equal or superior to other kinds of treatment. He divides his subject into two main branches of diseases of the digestive apparatus and diseases of metabolism. In the former he discusses the subject under Diseases of the Oesophagus, Stomach, Intestine, Peritoneum, and Liver, and in the latter under the headings of Obesity, Gout, and Diabetes. He believes that hydrotherapeutic treatment is valuable in neuroses of the oesophagus and stomach, in hyperacidity, atony, gastroptosis, and catarrh, also in many affections of the intestine, including catarrh, nervous diarrhoea, mucous colic, meteorism, constipation, haemorrhoids, and enteroptosis. It is also an agent of value in the treatment of acute and chronic peritonitis, either general or localized. In diseases of the liver he finds it useful in catarrhal jaundice, cholecystitis, gall stones, and in relieving hepatalgia and other painful affections. In the latter class it has, as is well known, a large sphere of action in the treatment of obesity when combined with neurasthenia or with gout, also in thyreogenous obesity, as well as in gout in its numerous manifestations, in diabetes associated with gout or obesity, in diabetic neurasthenia, and in relieving the neuralgias and neuritis of severe diabetes. Dr. Tobias deals with all these points briefly and clearly, and does not claim too much.

In this fasciculus of Professor ALBU'S[3] Encyclopaedia of Diseases of Digestion and Metabolism, Professor TH. ROSENHEIM deals with the diseases of the sigmoid flexure. He justifies singling out this part of the colon for a monograph, as he holds that it is an independent portion of the large bowel and is anatomically and functionally distinct; moreover, it is especially the seat of election for numerous diseases. He divides its affections into inflammatory, including acute and chronic sigmoiditis with their varieties; new growths, including cancer and adenoma; and, lastly, functional or nervous affections. Of the inflammatory conditions, chronic sigmoiditis is most important on account of the frequency with which it occurs and the difficulty of its diagnosis. For this purpose he claims that great assistance can be obtained from the use of the endoscope. Membranous or mucous colitis may, no doubt, be associated with nervous spasm and constipation, but it is often seen in connexion with various pathological conditions. He recommends for its treatment diet as free as possible from cellulose and containing little meat and no condiments, much butter, cream, yolk of egg, and soft cheese; vegetables and fruit should be given in *purée;* milk puddings, milk coffee, milk tea, gruels, and mineral waters. Rest and warmth are important, hot compresses may be employed locally, or hot sitz baths. He uses bromides, belladonna, or opium to soothe peristalsis, and oil enemata to empty the bowel with irrigations of warm water or hot solution of Carlsbad salts or hot Carlsbad or Vichy water. He recommends for the various inflammatory conditions of the sigmoid irrigation with medicated solutions, which should be run in with a funnel and allowed to remain from three to ten minutes; the quantity used is from 500 to 600 c.cm. The patient should first lie on the left side and then on the right with the hips raised; after the fluid has run out an opium or morphine suppository may be introduced if there is any pain. He uses nitrate of silver 1 to 1,000, tannin ½ to 1 per cent., protargol 0.3 to 0.8 per cent., bismuth or chalk 60 to 90 grains in half a pint of water at the temperature of the body. These injections should not be used more than every other day, and he warns us against excessive zeal in the use of local remedies. He thinks that surgical aid should only be asked as a last resource and never in nervous cases; a fistulous opening may be made and the

[1] *Verdauungs- und Stoffwechsel-Krankheiten.* Herausgegeben von Professor Dr. A. Albu in Berlin. Band II, Heft 7. *Die Gicht: ihre diaetetische Therapie.* Von Professor Dr. A. Schittenhelm, Erlangen, und Privatdozent Dr. J. Schmid, Breslau. Halle-a-S.: Carl Marhold. 1910. (Med. 8vo, pp. 38. M. 1.)

[2] *Anwendungsformen und Wirkungsweise der Hydrotherapie bei de* 1 *Verdauungs- und Stoffwechsel-Krankheiten.* Von Ernst Tobias. Halle-a-S.: Carl Marhold. 1910. (Med. 8vo, pp. 54. M. 1.40.)

[3] *Sammlung Zwangloser Abhandlungen aus dem Gebiete der Verdauungs- und Stoffwechsel-Krankheiten.* Herausgegeben von Professor A. Albu in Berlin. II Band, Heft 6. *Die Erkrankungen der Flexura Sigmoidea.* Von Professor Dr. Th. Rosenheim. Berlin. Halle-a-S.: Carl Marhold. 1910. (Med. 8vo, pp. 78. M. 1.80.)

bowel irrigated with medicated solutions. He gives a good description of cancer affecting this part of the bowel, and lays stress upon the latency of its early symptoms and the fact that the disease may last five or six years. He does not approve of early colotomy in order to prevent the occurrence of obstruction, as he finds it does not always give the relief anticipated, and the condition of the patient is, in his opinion, a wretched one. Under functional affections of the sigmoid he discusses Hirschsprung's disease, and quotes Schreiber's case of a young girl, where the condition was apparently due to spasm at the junction of the pelvic colon with the upper part of the rectum; it was cured by judicious treatment in which opium played a chief part, and he uses this as an argument in favour of medical treatment; but he might have quoted Dr. Hertz's case (*Constipation and Allied Intestinal Disorders*, p. 220) of the little boy whose condition was apparently caused by the valvular action of a ball of hardened faeces, and was cured by this being broken up and the colon kept empty by appropriate means. Professor Rosenheim is certainly right in what he says about surgical intervention, for although when successful the result is splendid the mortality is too high for it to be undertaken until all other means have failed.

We have received Parts VIII and IX of the American translation of Professor VON NOORDEN'S *Pathology and Therapy of Disorders of Metabolism and Nutrition*.[4] They deal with inanition and fattening cures, and the technique of reduction cures and gout, each part being translated and edited under the supervision of Dr. A. C. CROFTAN of Chicago. We reviewed the German edition of Parts VIII and IX last year (June 5th, 1909, p. 1362). The former contains a description of the metabolism of fasting, and explains the method of calculating the degree of undernutrition in a given case. On this basis Professor von Noorden establishes his fattening cures, of which the essential part is the addition of 1,000 heat units to the normally sufficient diet of the individual concerned, tables being given to enable the practitioner to construct his dietaries. Stress is laid on the need for active exercise if the increase of weight is to be anything more than an accumulation of fat. We note on pages 44 and 56 a reference to page 13, which in both instances should be page 26. In Part IX Professor von Noorden regards obesity as in the vast majority of cases dependent upon over-feeding, assisted often by want of exercise, but he admits that there are rare instances in which there is no evidence of excess of food and where investigation has shown that there is diminished metabolism; this group he attributes to hypothyroidism or defective action of the thyroid gland. Following these principles, his reduction cure consists of reduced diet. His minimal diet contains 120 grams of albumen, 30 grams of fat, and 100 grams of carbohydrates, its total heat value being only 1,182 calories; his maximal diet contains 180 grams of albumen, 30 grams of fat, and 120 grams of carbohydrates, giving a total heat value of 1,510 calories. He emphasizes the need for weighing and measuring food. He insists that all cases should be treated individually, and that the practitioner should avoid routine. Bodily exercise on the part of the patient he regards as most important, but this must be in the form of walking, cycling, rowing, or tennis; he thinks massage and horseback riding useless. He does not speak favourably of mineral waters, which have little effect, except in so far as they are accompanied by strict regimen or where their action produces purging and impairs absorption. He thinks the effect of sweating cures is transient unless it can be maintained by diet. Cool or cold baths are beneficial by hardening the patient, stimulating the circulation, and increasing the katabolism of fat. For cases of hypothyroidism he recommends cautious thyroid medication, the preparation he generally uses being Merck's thyreoidinum siccatum, of which he gives 1½ to 5 grains daily

[4] *Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition.* By Professor Carl von Noorden. Parts VIII and IX. Inanition and Fattening Cures; Technique of Reduction Cures and Gout. Edited and Translated under the supervision of Alfred C. Croftan, M.D., Chicago, U.S.A. London: Rebman, Limited. 1910. (Demy 8vo, Part VIII, pp. 103; Part IX. pp. 112. 5s. each)

In the treatment of gout he lays stress first of all upon the importance of accurate diagnosis, and complains that in Austria, at least, where true gout is rare, this name is often applied to cases that are really rheumatic, and could be cured by adequate doses of salicylates. In true gout he considers it important first to determine the amount of the endogenous uric acid by giving a purin-free diet. This in healthy persons should be about 0.42 gram, and it is diagnostic of the gouty constitution that upon such a diet the uric acid eliminated does not fall so low as this. He thinks salicylate of soda and its derivatives, mineral acids, thyminic acid, and possibly also saline mineral waters, increase the value for endogenous uric acid a little, while alcohol decreases it; that is to say, the former probably improves elimination while the last causes a certain amount of retention; he does not believe that either exercises any influence upon the formation of uric acid. He recommends that the gout should be treated in the first instance by a purin-free diet, and that the tolerance of each patient for purins should be determined just as we determine the tolerance of diabetic patients for carbohydrates. With regard to drugs he prefers calcium salts to alkalis and mineral waters such as Wildungen and Contrexéville water to Vichy or Fachingen. He believes that solurol or thyminic acid is of advantage, but should be used only for a week at a time, and he employs colchicum and salicylate of soda in his treatment.

In this work on dyspepsia[5] Dr. SOLTAU FENWICK tells us that he has given the outcome of the clinical experience gained by the personal examination and treatment of more than 18,000 persons. His view is that in a large proportion of cases of dyspepsia the symptoms originate entirely in the intestines, and are caused by a derangement of the liver, pancreas, or bowel. According to him, "disturbance of the digestion in the stomach is rarely due to a primary disorder of that viscus," and again, "chronic inflammation of the stomach is invariably due either to toxic poisoning or to serious disease of some other vital organ of the body." He classifies dyspepsia as due to (1) abnormalities of secretion; (2) failure of the muscular power of the stomach; (3) inflammation of the stomach; (4) disturbances of the nervous mechanism of the stomach; (5) displacement of the stomach; (6) the presence of foreign bodies and living creatures in the stomach; (7) the dyspepsia of infancy and old age; (8) dyspepsia dependent upon diseases of other organs; (9) intestinal indigestion; the disadvantage of this method being that two or more of these conditions are often associated in the same case. We do not think it is satisfactory to take "dyspepsia" as a starting point, as it is a symptom which is common to such a large number of diseases, many of them not primarily affecting the digestive organs, and yet Dr. Fenwick for some reason excludes from his consideration dyspepsia due to such definite diseases of the stomach as ulcer and cancer. One of the best chapters is that on hypersecretion of gastric juice, of which he holds the main indication to be the presence of more than 20 c.cm. of acid contents containing free hydrochloric acid in the fasting stomach. This condition he believes is always due to organic disease, either in the stomach or in some other abdominal organ, so that he suggests in all these cases the abdomen should be opened, and if there is no ulcer in the stomach or duodenum, the presence of gall stones and appendicitis should be looked for. He finds flatulence an invariable symptom in this affection, but we doubt whether he is right in saying that it is "chiefly due to the fermentation of the carbohydrate constituents of the food," for as he has elsewhere pointed out, the presence of abundant hydrochloric acid checks this fermentation, and so far as we are aware all recent investigations of the nature of the stomach gases go to show that these mainly consist of atmospheric air, and that the amount of gas produced by fermentation is inconsiderable and insufficient to cause the distension of which these patients complain. This mistake, as we believe it to be, is repeated in other places. We notice that on p. 122 the author states

[5] *Dyspepsia: Its Varieties and Treatment.* By W. Soltau Fenwick M.D.Lond. London: W. B. Saunders Co. 1910. (Med. 8vo, pp. 485 Illustrated. 13s.)

that "a gastric splash which can be obtained an hour or more after a meal is a certain indication of impairment of the muscular power of the stomach," yet on a previous page he had noted that this sign may be elicited occasionally "in healthy persons at the end of the digestion of a large meal, or from the presence of liquid and gas in the colon," so that on his own showing it cannot be regarded as a "certain sign," and in our opinion it is an exceedingly fallacious one. The statement to which we have just referred occurs under the heading of Myasthenia Gastrica or Stomach Atony; and, as a further test for this condition, Dr. Fenwick recommends giving a test meal and examining the stomach seven hours afterwards, when, if the stomach contains undigested food, the presence of stomach atony may be diagnosed. This is, we are convinced, a mistake. If undigested food can be found in the stomach seven hours after a meal, there is not merely weakness of the muscular walls but obstruction at the pylorus. It is most important that simple atony should be distinguished from pyloric obstruction, and, in our opinion, this can be done by examining for stasis seven, or even six, hours after a meal. It has been our invariable experience that even myasthenic stomachs empty themselves completely in six hours, and that where stasis exists there is always something more than stomach atony. We are surprised at Dr. Fenwick's preference for such an uncertain method as auscultatory percussion for determining the size of the stomach, and we regard his reference to the dangers or disagreeableness of distension by air or CO_2 as fanciful. We do not believe it possible by his way to determine accurately the size of the stomach when surrounded by air-containing organs; and if the point is worth deciding, as we believe it to be, it should be done by a method less likely to lead the observer astray. Chapter VII deals with the presence of hair balls, bezoars, gastroliths, beetles, slugs, lizards, and even snakes, in the stomach, and contains many curiosities of medical literature, but we may wonder why it is included here. The sections on treatment are sensible but somewhat general, and afford no very precise information as to the administration of food or drugs.

WE have received a copy of the third edition of Major BASU'S booklet on the *Dietetic Treatment of Diabetes*,[6] of which we noticed the first edition in October last year, so that it has evidently been favourably received in India, where, as is well known, diabetes is a common disease. Major Basu recommends the total withdrawal of meat, alcohol, tea, coffee, and cocoa from the dietary of diabetics, while he uses cocoanut and other oleaginous seeds as a substitute for animal proteid.

THE CAUSES OF FLATULENCE.

THE feeling of distension after eating is to the public mind perhaps the commonest indication of a disordered digestion, and the eructation of gas by which this symptom is relieved is generally assumed to be the expulsion of a product of an abnormal stomach zymosis. This view, which is practically universally held by the laity, was also until lately that accepted by the medical profession; but during the last twenty or thirty years there has been a decided tendency to adopt a simpler explanation, and at the present time most authorities on diseases of the stomach accept the view that flatulence is mainly due to air which has been swallowed, and that the amount of gas present resulting from gastric fermentation is, as a rule, minute in quantity and of little moment, although under certain conditions considerable quantities of gas may be produced in the stomach, and not only carbonic acid gas but marsh gas and sulphuretted hydrogen. Chemical investigation has shown that the gas in the stomach consists mainly of nitrogen with only small quantities of other gases (Linossier, Soupault, Ewald, and Ruppstein). The fermentation theory has been far the most popular, but another which has found some favour with physiologists at various times, mainly owing to an experiment of Magendie, is that gas may be exhaled from the mucous membrane of the stomach or intestine; but there is not the slightest evidence that this ever takes place, and in the experiment of Magendie just referred to, where gas was formed in a ligatured loop of intestine, there was nothing to show that the gas was not formed by fermentation of remains of food in the portion of bowel. The other view is that the gas might originate in the intestine by fermentation of cellulose, which we know takes place to a considerable extent with abundant formation of gas, but there is good reason to believe that the pylorus under ordinary conditions is capable of resisting much greater pressure than would be produced in this way. Dobrovici (*Thèse de Paris*, 1909), experimenting on dogs, found the pylorus remained closed under five times the normal pressure, but undoubtedly under certain pathological conditions the pylorus may give way, gas as well as other intestinal contents may enter the stomach, as, for example, in peritonitis; but the ordinary flatulence of dyspepsia is not to be thus explained.

The Roentgen-rays method of examining the stomach has shown that after eating there is always a certain amount of gas in the stomach, occupying the highest part of the fundus, and there can be no question that this gas enters the stomach with food and drink; its quantity varies with circumstances, but the most common conditions which favour its presence in excess are imperfect mastication of food from habit or want of teeth, and atony of the wall of the oesophagus and the cardiac opening, such as is often present in neurasthenia. By far the most common form of stomach ailment is that of the neurasthenic woman whose main complaint is of flatulence. No doubt among the poorer classes the teeth are often defective, but the same symptom is common enough among neurasthenics with good teeth and who masticate reasonably well, so that the other factor, want of tone in the gullet and cardiac sphincter is an important element in the production of this symptom. This subject is discussed in a little book written by Dr. H. MAUBAN entitled *L'aérophagie*,[7] to which Dr. Albert Mathieu has written a preface, as it is a question to which he has given much attention and made numerous contributions during the last ten years. Dr. Mauban is a warm advocate of the view that deglutition of air is the chief cause of flatulence. He shows in his history of the subject that swallowing of air has been recognized as an occasional occurrence for many years. The first recorded instance quoted by him was that of a young conscript who in order to evade military service succeeded in imitating severe tympanites, the case being recorded in the thesis of Déjardin in 1814. Andral in 1848 admitted that certain individuals have the power of swallowing air, and can thus produce an instantaneous tympanites, and this was allowed by Longet (1861), Demarque (1866), Willième (1868), and Piorry (1871), but the first to recognize its importance and frequency was Bouveret (1891), although he noted its occurrence mainly in nervous and hysterical subjects. In 1898 Mathieu drew attention to its frequency in dyspepsia apart from hysteria. He said that aërophagy was frequent among dyspeptics, and particularly among nervous dyspeptics, and when he brought the subject before the Société Médicale des Hôpitaux he was supported by Soupault, who subsequently, in his book on *Diseases of the Stomach* (Paris, 1906, p. 225), stated it as his opinion that a large part of the stomach gas is introduced by the mouth and oesophagus either with the saliva or with food and drink, and that gases which result from fermentation are small in quantity under normal conditions, and only acquire some intensity in disease; while most authors attribute the principal importance to this last cause for the production of gas, he believed that they exaggerated the part it played. Dr. Mauban is chiefly concerned with those cases in which the patient is constantly eructating, and he believes that this is an acquired habit; the patient feels his stomach distended, and in the endeavour to expel wind swallows more, until the gas in the stomach reaches a certain tension, when the cardiac opening gives way, it escapes in a noisy fashion, and the patient feels considerable relief; but he

[6] *The Dietetic Treatment of Diabetes.* By B. D. Basu. Third edition. Allahabad: The Panini Office, Bhuvaneshvari, Ashram. 1910. (Cr. 8vo, pp. 52.)

[7] *L'Aérophagie.* Par le Dr. H. Mauban. Paris: G. Steinheil. 1910. (Cr. 8vo, pp. 158. Fr. 2·50.)

dees not take into sufficient account the part played by imperfect mastication and weakness of the walls of the oesophagus and stomach in favouring the initial entrance of air. In consequence of this, the treatment that he recommends is not very practical, and is mainly concerned with checking the habit of eructation. In our view, it is most important to see that the patient's teeth are sufficient and that mastication is duly performed, while in addition the muscular atony should be treated by all measures that can improve the general health, such as nerve tonics, douches and baths, and bracing climate. For the prevention of the habit of eructation Dr. Mauban recommends keeping the mouth open by holding a piece of cork between the teeth or by tying a ribbon tightly round the neck above the thyroid cartilage so as to make deglutition painful and thereby check a habit which has become involuntary.

RECORDS OF HEART MOVEMENTS.

PROFESSORS F. KRAUS AND G. NICOLAI,[8] the director and assistant respectively in the second medical clinic of the Charité, Berlin, have given us an instructive book on the electro-cardiogram. The method of recording the heart by the string galvanometer of Einthoven is coming daily into prominence, and this instrument will shortly have to form part of the equipment of all the large hospitals. The authors give in the first part a lucid account of the theory and practice of this instrument and the normal electro-cardiogram and its interpretation. The second part of their book is taken up with the clinical use of the instrument. The electro-cardiogram helps greatly in the elucidation of all irregularities of conduction of the excitatory wave either in time or place. The authors illustrate and elucidate the effect of extrasystoles, of irritation of the auriculo-ventricular node of Tawara, etc., by experiments on the dog's heart. The book has been published without cognizance of the recent valuable researches carried out by Dr. T. Lewis in this country, and published some in our own columns, some in *Heart*. These researches show, among other things, that what Mackenzie termed nodal rhythm is really due to fibrillar contraction of the auricles, and that this may be set up experimentally by interfering with the blood supply and nutrition of the auricles. The work of J. Mackenzie on the venous pulse of Wenckebach, and the invention of the string galvanometer by Einthoven, have made a great step forward in the study and treatment of heart disease, and the new laboratory methods of inquiry are destined to render the greatest service to medicine.

COPENHAGEN MATERNITY HOSPITAL.

IN commemoration of the Copenhagen Royal Maternity Hospital, the site of which is to be changed, Professor LEOPOLD MEYER[9] and his staff have published a volume of papers dealing with the work of the hospital in recent years. In his introduction Professor Meyer points out that the change of quarters on this occasion is not due to puerperal fever, as was the case in 1840 and 1844. The death-rate from true puerperal fever is, in fact, now so low that many of the midwives trained in the hospital have never seen a case. After a careful analysis of the 21 deaths from puerperal fever in the years 1900–1909, only 6 could be laid to the hospital's account, as the remaining 15 were clearly infected before admission. The mortality, therefore, out of 13.874 admissions is as low as 0.43 per 1,000. Compare this with the mortality of 4.95 per 1,000 in the years 1880–89, and 7 per cent. in the years 1860–64! The routine procedure which gives such a satisfactory result is described. Patients are admitted only when labour pains have begun. The whole body is washed with soap in a warm bath. The patient is then put to bed, and the external genitals are washed first with sterilized jute (?) soap and tepid water, then with sterilized water, and finally with 1 in 1,000 perchloride or 2.5 per cent. carbolic. Before washing the genitals or making an exploration, the operator's hands undergo a series of antiseptic rites lasting ten minutes. No vaginal douche is given unless an exploration has been made before admission, and even then it is not always given. Local treatment, such as curetting and douching of infected cases, has been abandoned in favour of a masterly inactivity, which is much to the patient's advantage, according to Professor Meyer, who, on this point, has the support of the Gynaecological Congress at Strassburg in 1909.

Oluf Thomsen supplies an interesting paper on the need for testing candidates for wet nursing with Wassermann's reaction. He found the milk of fifty-three syphilitic mothers give a positive reaction with but one exception, whereas only thirty-three of the mothers gave a positive serum test. The milk should be examined before birth or within a couple of days after birth as the reaction is less certain later. A positive reaction with 0.05 c.cm. or less of milk is certain proof of syphilis. With larger quantities of milk, that is 0.1 or 0.2, a positive reaction may be given by a healthy mother. Folmer Bentzen reports on Pirquet's tuberculin reaction, which was negative in all the 317 newborn infants tested with undiluted "Alt Tuberculin." His results coincide, therefore, with other workers in this field.

In a second paper Professor Meyer gives a clinical lecture on Bandl's ring, its pathology and treatment. Victor Albeck reviews the course and treatment of eclampsia; and E. Hauch contributes papers on extra-membranous pregnancy (hydrorrhoea amnialis), and on methods of delivery *per vias naturales* before there is full dilatation of the os. This procedure was necessitated by eclampsia in half the cases, which amounted altogether to 1 per cent. of all the admissions during the past ten years. Birger Olesen deals with the development of the fetus in placenta marginata, and Oscar Horn discusses labour in elderly primiparae. The prophylaxis of gonorrhoeal ophthalmia is described by Otto Möller. E. Hauch and J. E. Lohse report on a case of pregnancy with hydronephrosis. Several excellent illustrations are given, and most of the articles are admirably concise and digestible.

NOTES ON BOOKS.

THE *Therapeutischen Leistungen* for 1908,[10] which was published last year, completes the fifth lustre of its existence. This practical little handbook is the joint work of Dr. ARNOLD POLLATSCHEK, of Karlsbad, and Dr. HEINRICH NÁDOR, of Máramarossziget. Compiled in the form of a dictionary, it forms a complete and up-to-date guide in every branch of therapeutics, and should prove of great value as a book of reference to the practising physician.

Dr. R. J. COLLIE has reprinted in a pamphlet entitled *Medico-Legal Aspect of the British Workmen's Compensation Act, 1906*,[11] a paper he read before the Congrès International des Maladies Professionelles, held in Brussels last September. The author, from the nature of his position as medical officer to a large employer of labour, and also to an insurance company, has acquired such an experience as qualifies him to entertain few doubts as to the value of his opinion. The matters discussed are none of them very new, but they are set out in a very interesting style. Dr. Collie has sympathy for "the moral degradation which actions for damages bring upon the working classes." He points out the paths of duty to his medical colleagues and has much advice for our law-makers. "Contracting out" of the Act is favoured, the necessity of the presence of a medical assessor sitting with the county court judge is urged, and also that Section 15, Schedule I, should be so amended that the registrar of the court may refer the matter to a medical referee on application being made by *either* party; further, Dr. Collie holds that in large cities whole-time salaried official medical referees should be appointed and have an independent position.

[8] *Das Elektrokardiogramm des gesunden und kranken Menschen.* By Professor F. Kraus and Professor G. Nicolai. Leipzig: Veit and Co. 1910. (Med. 8vo, pp. 344. Mk. 12.)

[9] *Arbejder fra den Kongelige Födsels og Plejestiftelse i Kjöbenhavn.* Utgivne af Professor Leopold Meyer, Gyldendalske Boghandel Nordisk Forlag. 1910. (Sup. roy. 8vo, pp. 199.)

[10] *Die Therapeutischen Leistungen des Jahres 1908.* Ein Jahrbuch für praktische Ärzte. Bearbeitet vom Herausgegeber Med. and Chir. Dr. Arnold Pollatschek, Brunnenarzt in Karlsbad Korrespondierendes Mitglied der K.K. Gesellschaft der Ärzte in Wien, und Med. U. Dr. Heinrich Nádor, in Máramarossziget. XX. Jahrgang. Wiesbaden: Verlag von J. F. Bergmann. 1909. (Pp. 354.)

[11] *Medico-Legal Aspect of the British Workmen's Compensation Act, 1906.* By R. J. Collie, M.D., J.P. London: Baillière, Tindall, and Cox. 1911. (Price 1s.)

Dr. TAGESON-MOELLER thinks that the strap apparatus used by Oldevig,[12] who is the director of an institute for Swedish exercises at Dresden, ought to be better known to the medical profession, considering the interest taken in the treatment of scoliosis. Moreover, the method is applicable to other conditions. It has been used by Oldevig since 1890 and was described by him in the Swedish periodical, *Svenska gymnastiken i in- och utlandet*, 1905, 1909, and is in use in nineteen institutes. The chief advantage of the strap exercise lies in the possibility of the careful isolation of particular groups of muscles, and it has the marked superiority over any treatment by supports that it calls out the greatest possible activity on the part of the patient. Its disadvantage is that it requires several assistants, but this is not felt in an institute, and even an operator working alone can overcome it by a little arrangement. It may appear at first to be difficult to learn, but it is really plain and easy to manage; the exercises given in this book are only examples and any operator of experience should with this introduction be able to extend it in various ways. The straps must be made of non-elastic material and furnished at each end with handles; they are 1½ to 2 metres long and of various breadths. Their use is to maintain certain muscles at rest while the opposed weakened and relaxed are brought into action; it is in fact an application of the method of resistance movements, but the straps give the operator as it were longer and stronger arms and greatly extend the possibilities of the method. The book describes the proceedings in the treatment of various deformities and is illustrated by photographs. Its publication will doubtless serve the purpose of drawing attention to the method, which seems to have good testimony in its favour.

Churchill's Medical Directory[13] for 1911 has grown to 2,168 pages, although, judging from the numerical summary of the medical profession which is given in the introduction, it would appear that the actual growth in numbers as compared with 1910 was only 173, which is considerably below the average of the quinquennium. Of the 40,642 persons whose names appear, 3,300 are officers in the Navy or Army or Indian Medical Services, and 5,188 reside abroad; of the remainder 6,415 give an address in London, 17,721 in the English provinces, 1,336 in Wales, 3,958 in Scotland, and 2,724 in Ireland. The information provided in the introductory pages has been increased in several directions. A very useful addition is a list of coroners for England and Wales. The notes upon British health resorts have been revised, and in a short list of Continental spas and climatic health resorts, many useful indications are afforded; both these sections will no doubt be found useful for reference. To the legal section has been added an abstract of the law and regulations as to cremation. The new issue seems to us, so far as we have examined it, not merely to have maintained the high reputation won by the directory in the past, but to be calculated even to have added to it.

The edition of *Who's Who*[14] for 1911 contains some 80 pages more than that for 1910. The growth would appear to be due to an increase in the number of biographies, for the present volume contains some 23,000 separate entries. Although mainly concerned with British citizens it contains the names of a few distinguished persons in other countries—such as, for instance, Mr. Roosevelt, M. Anatole France, Dr. Bethmann Hollweg, M. Briand, and Herr R. Strauss, the composer. The volume is really indispensable to any one who wishes to be accurate in his references to contemporary statesmen, writers, artists, and men of science.

The Writers' and Artists' Year Book[15] for 1911 is a useful directory giving particulars of journals, magazines, and publishers both at home and abroad, and of the kind of literary or artistic material likely to be acceptable.

Although Mr. D. W. HORNER'S pamphlet on *Weather Instruments and How to Use Them*[16] has been written specially for amateur meteorologists, it contains many suggestions which should prove useful to the more expert. In successive chapters are well and clearly described the methods of using a rain gauge, the different forms of thermometers and barometers, sunshine recorders, and anemometers. Illustrations of these instruments are given from photographs, some of which are excellent reproductions. The picture of the Snowdon pattern rain gauge would have been more intelligible to a learner if it had been reproduced from a line drawing.

[12] *Ein neues Geraet und neue Uebungen der schwedischen Heilgymnastik zur Behandlung von Rueckgrats-Verkruemmungen.* Von Geh. Hofrat J. Oldevig, Dresden. Mit einer Einleitung von Dr. med. Axel Tagesson-Moeller. Berlin; Eduard Trewendt's Nachfolger. (Med. 8vo, pp. 51. M. 1.80. Abb. 26.)

[13] London: J. and A. Churchill. 14s.

[14] London: A. and C. Black. 10s.

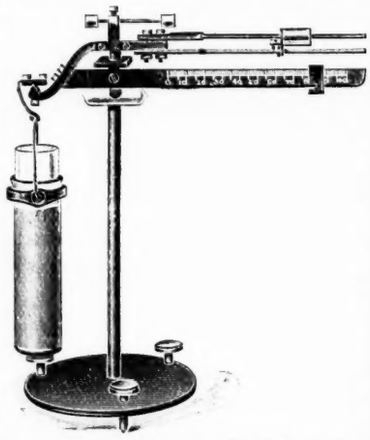
[15] London: A. and C. Black. 1s.

[16] *Weather Instruments and How to Use Them.* By D. W. Horner, F.R.Met.S.Lond. Witherby and Co. (Cr. 8vo, pp. 48; 9 illustrations; price 6d.)

MEDICAL AND SURGICAL APPLIANCES.

A Specific Gravity Appliance.

A SPECIFIC gravity appliance, which has been devised by Dr. C. BUTLER SAVORY, of Fleet, Hants, is shown in the accompanying drawing; but though it makes the general structure evident, it does not bring out the scientific character and extreme neatness of the device, nor the ease with which it may be used for the purpose of testing the specific gravity of any liquid. It stands about 5 in. high, and can be carried about in a small leather wallet measuring about 6 in. long by 3 in. wide and 1 in. deep. The amount of liquid required is very small, 10 c.cm., or 150 drops, sufficing. The whole operation of determining the specific gravity of a liquid can be completed in less than a minute. The determination is real and precise, and not merely roughly approximate, as are the results when a specific gravity float is used. The shoulder and beam are made of metals having different expansions, and in this way lengthening owing to variation in temperature is reduced to a minimum. Two scales are used, the top or ivory scale being graduated to hundreds, and the lower scale to tens and units. In addition, the lower scale carries a rider, which is arranged as a vernier, thus allowing of results being read to an extra decimal point. Its combination of accuracy in results with ease of use makes it admirably suited to the needs of practitioners for urine and milk testing.



MEDICINAL AND DIETETIC PREPARATIONS.

Bismuth Gauze.

MESSRS. BURROUGHS, WELLCOME, AND CO. (Snow Hill, London, E.C.) have submitted samples of their "Tabloid" brand bismuth gauze, which is recommended as an antiseptic dressing, especially in gynaecology and in aural and nasal practice. It is supplied in 1-yard rolls of various widths, sterilized; each is enclosed in a wrapper and an outer coating of the nature of a varnish, by which the contents are protected from contamination. The gauze is odourless, and is stated to be non-toxic; it is claimed that when packed in the uterus as an absorbent dressing it has remained odourless much longer than iodoform gauze, and it is put forward as suitable for use in curetting and operations on the cervix and vagina.

Tuberculin and Tubercle Vaccine.

Messrs. Burroughs, Wellcome and Co. (Snow Hill, London, E.C.) have submitted specimens of several of their tubercle preparations, which will, no doubt, be largely employed in view of the increased use which is now being made of such means of treatment. New tuberculin and tubercle vaccine are prepared from both human and bovine strains; these are supplied in hermetically sealed vials each containing one dose (1 c.cm.), and the new tuberculin, human and bovine, is also supplied in the form of hypodermic tabloids, to be dissolved immediately before injection. Another preparation is tuberculin (human) for von Pirquet's cutaneous reaction; this diagnostic medium is put up in tubes drawn out at both ends and sealed, and small indiarubber ejectors are supplied with each box for blowing the liquid out on to the scarified surface. The manner in which all these preparations are put up leaves nothing to be desired.

CENTRAL MIDWIVES BOARD.

REPORT ON THE WORK OF THE BOARD FOR THE YEAR ENDING MARCH 31ST, 1910.

THERE were sixteen Board meetings during the year, including four special meetings for the investigation of cases where a local supervising authority had reported a midwife for malpractice, negligence, or misconduct.

The annual meeting of the Board was held on April 22nd, 1909. Dr. Champneys being again elected Chairman; Sir George Fordham was chosen Honorary Treasurer, but resigned the office in March, 1910.

Mr. J. Ward Cousins, who had represented the Royal College of Surgeons since the formation of the Board, retired on March 31st, 1909, and was succeeded by Mr. Cuthbert Hilton Golding-Bird, F.R.C.S. The death occurred on January 18th, 1910, of Dr. Stanley Atkinson, for nearly three years the representative on the Board of the Incorporated Midwives Institute. Dr. Atkinson was a regular attendant at the meetings of the Board and its committees, and his zeal and capacity for work have caused his loss to be deeply felt by his colleagues. He has been succeeded by Dr. G. E. Herman.

The Midwives' Roll.

On March 31st, 1910, the names on the Midwives' Roll amounted to 29,209, an increase for the year of 1,928. Of the total 8,147 have passed the Board's examination, and 9,643 have been admitted to the Roll in virtue of prior certification under Section 2 of the Midwives Act. The total number of trained midwives is therefore 17,790, as against 11,419 untrained, the percentages being 61 and 39. Owing to the incompleteness of the returns made by the local supervising authorities it is impossible to estimate with accuracy the respective proportions in the case of practising midwives. A large percentage of the trained women obtained their certificate without any intention of ever practising, many others have ceased to do so, and a considerable number practise in the Colonies or in foreign countries. There can be no doubt that at the present time the untrained practising midwives are largely in excess of the trained.

Training and Examination.

Of the 2,683 candidates who entered for the examinations 2,219 passed, the percentage of failure being 17.3, as against 19.2 for the previous year; 1,272, or 57.3 per cent., of the successful candidates declared their intention of practising as midwives, and of this number 758, or 60 per cent., intended to practise in rural districts. This latter class constituted a percentage of 34.2 of the total number of successful candidates.

Leeds has been made an examination centre, and the written part of the examination is held at Plymouth and Cardiff, as well as at the regular centres. This has been found a great convenience to candidates from Cornwall, Devon, and South Wales.

There are 108 institutions at which midwives may be trained under the rules of the Board, including four in India and one at Hong Kong. Of the 103 in the United Kingdom 53 are Poor Law institutions.

The Board's memorandum on the meaning of the words "personally delivering," occurring in Rule C 1 (1), sent to all the recognized training schools in January, 1909, has, it is believed, had a good effect in securing more careful observance of the requirements of the rule. An instance having occurred in which a training school was found to have neglected to pay due attention to the terms of the Board's circular, the training school was in consequence removed from the list of institutions in which midwives may be trained. At a subsequent date the Board, being satisfied that the rule was now being strictly complied with, restored the institution to the list.

Penal Procedure.

Fifty-three penal cases have been heard by the Board, with the result that 23 women have been struck off the Roll, 14 censured, 13 cautioned, and 3 permitted to resign voluntarily.

The number of penal cases apparently shows a large diminution in the charges of negligence and misconduct brought against midwives by local supervising authorities when compared with the 92 cases of last year. This diminution is, however, mainly due to the fact that the penal sittings usually held in March were this year held in April, and consequently do not come under review in this report.

The penal procedure of the Board as laid down in Rule D has been under consideration during the year. The rule provides that "the secretary, or other person appointed by the Board for the purpose," shall conduct the case on the hearing by the Board of a charge of malpractice, negligence, or misconduct against a midwife in respect of which a local supervising authority has found a prima facie case to be established. In one or two cases, however, the local supervising authority has claimed to have the conduct of the case; and as in the opinion of the Board this would introduce confusion into the proceedings, the following resolution has been passed:

> Resolved, that Local Supervising Authorities be not allowed a hearing in penal proceedings before the Board, except by special leave of the Board, which may be given when, in the course of such proceedings, charges are made against an Authority, or its officers, to which an answer may be reasonably expected.

The Local Supervising Authority of Hertfordshire is desirous that, where the authority so wishes, the collection of evidence, the formulation of the charges to be met, and the conduct of the case at the hearing, should be left entirely to the authority, and that the Board should act in the matter in a purely judicial capacity. On receipt of this suggestion from the County Council, the Board decided to communicate with the local supervising authorities of England and Wales, stating the proposals made, and inquiring whether the authorities were in favour of amending Rule D accordingly. The replies received show that twenty-one authorities are in favour of the alteration of procedure and sixty-six against it, while five favour the establishment of a circuit system whereby provincial courts for groups of counties might be held at certain appointed centres.

Another instance of obtaining admission to the Roll by virtue of a false certificate of character, similar in all essential features to the case of R. *v.* Inglis, already reported, came to light during the year. In March, 1905, Sarah Ann Marsh, of Eccles, applied for and was granted a certificate under Section 2 of the Midwives Act in virtue of a certificate of good character signed by a medical man of Eccles. The woman had in fact been frequently convicted of drunkenness before the date of the medical man's certificate, and has been repeatedly convicted since. Her name having been removed from the Roll, the papers in the case were forwarded to the Director of Public Prosecutions, who then instituted proceedings against the medical man and Mrs. Marsh under Sections 11 and 12 of the Midwives Act. The magistrates dismissed the case against the medical man, but committed Mrs. Marsh for trial at the Salford Hundred Quarter Sessions. She pleaded not guilty, but was convicted and bound over under the First Offenders Act to come up for judgement when called upon.

Finance.

The recovery from the local supervising authorities of the apportioned adverse balance appearing on the Board's financial statement for 1908, amounting to £1,853 8s. 5d., was effected without serious difficulty, though some of the authorities delayed payment till nearly the close of the year, and in the case of one Welsh county it became necessary to give notice that the Board would apply to the High Court for a mandamus unless prompt payment were made.

The apportionment in respect of 1909 amounts to £2,007 3s. 1d. The number of midwives returned by the local supervising authorities as having notified their intention to practise during 1909 was 13,608. This total compares with 13,348 in 1908, and 12,964 in 1907, and the apportioned contribution from the local supervising authorities works out at the rate of about 2s. 11½d. per midwife.

Proposed Amendment of Midwives Act.

The Board held a special meeting in October to consider what action should be taken on the recommendations of the Midwives Act Committee. The following is a summary of the resolutions carried:

1. Any amendment of the Midwives Act, 1902, in the light of the report of the Midwives Act Committee must provide for:
   (*a*) Adequate and certain remuneration of medical practitioners called in under the Board's regulations.

(*b*) More definite powers of suspension of midwives, whether by the local supervising authority or by the Central Midwives Board.
(*c*) Subvention from public funds of midwives who are unable to maintain themselves in sparsely populated and poor districts.
(*d*) Revision of the constitution of the Central Midwives Board so as to afford two representatives, to be chosen without restrictions, of the Midwives Institute.
(*e*) Systematic purging of the Midwives Roll in accordance with D (3).
(*f*) Revocation of the right of delegation of their powers under the Act by the local supervising authorities.

2. In the event of the establishment throughout the country of county nursing associations, working in co-operation with the local supervising authorities, and affiliated to the Queen Victoria's Jubilee Institute, as recommended by the committee, the institute should have two representatives.

3. Any deficiency in the Board's accounts should be apportioned on the basis of population, instead of on the basis of the number of practising midwives.

4. The Notification of Births Act, 1907, should be generally adopted throughout the kingdom as a valuable supplement to the operation of the Midwives Act. The addition of a column in the Register of Births for the entry of the name and status of the person who actually delivered the mother, would probably help to promote efficiency and check abuses in the practice of midwives. It would be desirable that such particulars should be required in all notifications under the Act of 1907, and, if necessary, the Act should be amended in this sense.

5. State provision should be made for the registration of still-births.

6. The medical officers of counties and county boroughs should be required to report annually to their authorities on the administration of the Act in their areas; copies of these reports should be forwarded to the Privy Council, the Local Government Board, and the Central Midwives Board, who should include a digest in their own report.

7. Midwives should be supplied with stamped forms for all notifications which they are, or may be, required to make to the local supervising authorities or the Central Midwives Board, and any books prescribed for their use should be provided gratuitously by the authority.

It was subsequently resolved to take no further action at present.

Ophthalmia Neonatorum.

The number of cases of ophthalmia neonatorum coming to the notice of the Board in the course of its penal administration has made it apparent that strong efforts should be made to combat the ignorance and carelessness which so frequently lead to the total destruction of the infant's eyesight. The rules have accordingly been strengthened by substituting "must" for "should" in the rule dealing with the cleansing of the child's eyelids, and by placing on the midwife the obligation of advising medical help in case of a purulent discharge in a woman who is pregnant or in labour.

By request of the Board the Chairman drew up a leaflet, adapted for the use of midwives, calling attention to the nature, causes, and consequences of the disease, and the preventive treatment to be adopted. Minute directions were also given as to the method of cleansing the eyelids, and the material to be used. About 24,000 of these leaflets have already been distributed to local supervising authorities, nursing associations, training schools, recognized teachers, and midwives having the supervision of pupils. The demand for the leaflet still continues, and a copy is sent with each certificate issued by the Board.

Rules.

The existing code of rules, originally sanctioned for a period ending on September 30th, 1909, was continued in force by an Order of Council for a further period of one year, and has since been similarly extended until June 30th, 1911.

The Period of Grace.

From time to time the Board has received applications for the grant of a certificate from women who, though duly qualified to have claimed the Board's certificate during the period of grace which expired on March 31st, 1905, nevertheless failed to do so. Many of the applicants were suitable and competent women whose services were required in the rural districts where they had been acting as midwives for a considerable number of years. In nearly every case the omission to claim was due to the fact that the local supervising authority had failed to give due notice of the effect of the Midwives Act as provided by Section 8 (7). In order to meet these cases of undoubted hardship, and acting on Recommendation (*a*) (3) of the Midwives Act Committee, the Board framed a rule in the following terms:

2. A candidate who has failed to claim to be certified under the Midwives Act within the time limited by Section 2 of the Act, and who satisfies the Central Midwives Board that, but for her failure so to claim, she would have been entitled to be certified under the Act, may be admitted by the Central Midwives Board to the roll of midwives upon such conditions as the Central Midwives Board shall think fit, and shall receive a certificate in the form set out in the schedule, and her name shall be entered by the secretary in the roll of midwives (Schedule, Form II, B). Provided always that no such candidate shall be admitted to the roll of midwives after September 30th, 1910.

The new rule was sanctioned by an Order of Council of March 14th, 1910, and under its provisions 555 women have been admitted to the Roll during the period ending September 30th.

Evidence of Improvement.

It is satisfactory to observe that the reports of the medical officers of health show in many cases a continued improvement in the old type of midwife still practising under their supervision in respect of cleanliness, carefulness, and observance of the rules.

THE COMPOSITION OF CERTAIN SECRET REMEDIES.*

MOTHERSILL'S SEASICK REMEDY.

A 2s. 3d. package contained six capsules, three containing pink powder and three brown. The dose is given as one of each kind, taken together, so that the package contains three doses.

The average weight of the contents of each capsule was 11¼ grains. Analysis showed the powders to have the following composition:

Pink Powder.

Sugar of milk	33.3 per cent.
Caffeine	8.2 ,,
Stearic acid	18.0 ,,
Chlorbutol	40.1 ,,
Colouring matter	a trace.

Brown Powder.

Powdered cinnamon	29.4 per cent.
Caffeine	8.4 ,,
Stearic acid	17.4 ,,
Chlorbutol	44.5 ,,

Chlorbutol is also known under the trade name, "chloretone." The stearic acid is probably added as a lubricant, to facilitate the filling of the powder into the capsules, although the amount is large for the purpose.

DR. LECOY'S VIGOROIDS.

These consisted of sugar-coated tablets, coloured blue externally. After removing the coating, the tablets had an average weight of 2.2 grains. The dose is stated to be two, three times daily.

Analysis showed them to contain:

Ferrous phosphate.
Quinine.
Strychnine.
A vegetable extract.
Sugar.
Starch.
Talc.

The ferrous phosphate, calculated as $Fe_3(PO_4)_2\,8H_2O$, from the iron found, was 8.7 per cent., or 0.19 grain in each tablet. The quinine and strychnine together amounted to 4.35 per cent., or 0.09 grain in one tablet; the strychnine was clearly not more than one-twentieth of the total alkaloid (= 0.005 grain in one tablet), but it was not possible to determine the amount exactly on the quantity available. The vegetable extract showed no well-marked properties by which it could be identified; the amount was small, the sugar constituting the largest part of the tablet.

* Previous articles of this series were published in the following issues of the BRITISH MEDICAL JOURNAL: 1904, vol. ii. p. 1585; 1906, vol. ii, pp. 27, 1645; 1907, vol. i, p. 213; vol. ii, pp. 24, 160, 209, 393, 530, 1653; 1908, vol. i. pp. 833, 942, 1373; vol. ii pp. 86, 595, 1022, 1110, 1193, 1285, 1566, 1697, 1875; 1909, vol. i, pp. 31, 909, 1128; vol. ii, p. 1419; 1910, vol. i, pp. 151, 213, 393, 1005, 1063, 1120; vol. ii, pp. 982, 1350.

LITERARY NOTES.

IN the *Bristol Medico-Chirurgical Journal* for March, 1910, there appeared an interesting paper by Captain V. B. Green-Armytage, I.M.S., entitled "Oriental Medicine—Stray Jottings." As usual in medical folklore, the first appearance of a new member of the human family in the world is surrounded with superstitious rites and observances. In Northern India the following method of foretelling the sex of an unborn child is adopted: At the seventh month a number of relations gather at the house of the expecting mother, and a few drops of milk are squeezed out of her breasts on to a piece of yellow cloth; when it dries, if it is white, the offspring will be a girl; if yellow, a boy.

Immediately after the birth of the child the mother is given a small piece of metal copper to swallow, called "dumree," which is supposed to expel the placenta. After this she is given a dose of asafoetida, to prevent her catching cold and to relieve the after-pains; this drug being also affirmed to be a stimulant. The midwife, like the gipsy of the West, is wise in her generation, for she demands at this stage something shining, such as a silver or gold coin, just to touch the umbilical cord with "for luck"; and then she proceeds to deal with it in the usual way—appropriating the coin for herself. In the East—unlike the West—the placenta is not a thing despised, but is buried with due state, along with a sacred leaf and small coin, to propitiate the gods; and the knife that cut the cord is kept sacredly for forty days, alongside the mother and child wherever they go or move, for it has a certain power against all ghosts and evil spirits.

During the puerperium the mother is looked after with great care. For forty days she is only allowed to drink boiled water in which a red-hot horseshoe has been cooled. No dog or cat is suffered to come near her; the influence of the cat in particular is dreaded as it is regarded as a witch. Any stranger coming to the house has to throw myrrh on the fire to ward off evil spirits. Musulman boys are circumcised between the ages of 7 and 14. The boy is placed on an earthen drum and *bhang* (cannabis indica) is administered. After the operation a peacock's feather and a copper ring are tied round the boy's neck as a safeguard against evil spirits and the wound is dressed with powdered benzoin. Of the native "hakim" in whom the uneducated Indians put their trust, Captain Green-Armytage says that it is difficult to describe his methods, for his eye and his conversation elicit the information he requires. He once asked a "hakim" how he proposed to make a diagnosis, as the patient was delirious. The reply was: "Sir, God knows his disease; we only know whether it is a hot or a cold disease, and according to which I find or think it, I shall give him of my drugs." Captain Green-Armytage admits, however, that the hakim's treatment has often excellent results; we venture to think that suggestion is the most potent remedy in his pharmacopœia. The hakim sends his surgical cases and others in which his treatment has failed to the Civil Surgeon. Among curious methods of treatment are mentioned the application of an oil expressed from the head of a cobra to a septic ulcer; and in cases of impotence the administration of a powder made from the penis of a crocodile which has been dried in the sun. A compress of sugar and soap is a very common local remedy for sores and boils. It is almost superfluous to say that charms play a large part in native Indian medicine. Captain Green-Armytage particularly mentions an amulet consisting of a metal disc inscribed with figures which added up vertically, diagonally, or horizontally make up the same total. This is believed to be a sovereign remedy for piles and confluent smallpox; all that is required is to wash the disc two or three times a day in water, drink the water, and mutter: "La-il-la-hah, il-lul-ha-ho, Mohamed, oor Rasul-Ullahah" (there is no other God but the true God, and Mohamed is the prophet of God). Among the lower classes in India surgery, except the use of the bluntest knife, is unknown; cases of compound fracture or peripheral gangrene are left untreated, except for the application of neem oil, till they are past all cure, and then they are sent to hospital.

The November number of *L'Hygiène* should receive special attention from its English readers, if only on account of a most interesting article it contains in which Professor Ehrlich's famous "606" is discussed from the French point of view. The writer of this article, who simply signs himself "Dr. V. C.," freely gives the great German scientist the praise which is justly due to him, but he himself has more confidence in the French preparation "hectine" than in the more widely known German remedy. Moreover, he claims the right of seniority for the French invention. "Hectine," which is composed, amongst other things, of arsenic, was invented two or three years ago by Dr. Mouneyrat, and it was employed with great success in several cases in France before the announcement of Ehrlich's discovery took the scientific world by storm. Though the latter is much more rapid in its effects, "hectine" and another and similar preparation, called "hectargyre" (the invention of Dr. Salmon, a young French physician), are, according to "V. C.," at once equally efficacious and far less dangerous. No deaths have ever resulted from the application of either of the latter remedies, whereas it is alleged that the former has already killed some dozen persons; and whilst treatment by "606" is extremely painful and necessitates a week in bed under close medical supervision, "hectine," on the contrary, causes so little bodily inconvenience that the patient is able to carry on his usual occupation. It must be remembered, however, that it needs twenty injections of hectine to produce an effect similar to that brought about by a single dose of "606." *L'Hygiène* contains several other items of interest besides this discussion of a most important question. A long article on the care of the eyes has been contributed by Drs. E. and Marc Landolt; whilst Dr. E. Agasse-Lafont has written an interesting account of the diseases to which workers in felt factories are peculiarly liable, amongst which mercury poisoning may be reckoned as the most deadly. Some little space is likewise devoted to that charming pleasure resort, "Les Terrasses," which has been built on the coast between Le Tréport and Dieppe, and which appears to offer every possible attraction to the visitor, whether he is in search of health or of amusement; and Drs. Lucien Jacquet and P. Jourdanet offer some valuable advice on the care and prevention of chilblains, principally by means of massage and gymnastic exercises for the hands and feet. The illustrations are, as usual, beautifully reproduced. In response to several inquiries we may state that the price of this most attractive magazine, which is published by Messrs. Goupil and Co., 25, Bedford Street, Strand, W.C., is 2s. a number.

AUSTRALASIAN MEDICAL CONGRESS.

THE ninth session of the Australasian Medical Congress will be held in Sydney from September 18th to the 23rd, 1911, under the Presidency of Dr. F. Antill Pockley. The Senate of the University of Sydney has granted the use of its buildings and grounds, and the Government of New South Wales has given its countenance and support to the Congress. Lord Dudley, Governor-General and Commander-in-Chief of the Commonwealth of Australia; Lord Chelmsford, Governor of New South Wales; Vice-Admiral Sir Richard Poore, Bart., Naval Commander-in-Chief of the Australasian Station; Lord Islington, Governor of the Dominion of New Zealand; Sir Thomas D. Gibson-Carmichael, Bart., Governer of Victoria; Sir William MacGregor, Governor of Queensland; Admiral Sir Day Bosanquet, Governor of South Australia; Sir Gerald Strickland, Governor of Western Australia; Major-General Sir Harry Barron, Governor of Tasmania; Sir Everard F. Im Thurm, Governor of Fiji, High Commissioner of the Pacific Islands; The Honourable J. H. P. Murray, Lieutenant-Governor and Chief Judicial Officer of New Guinea; the Honourable W. P. Cullen, LL.D., Chief Justice of New South Wales; Lord Plunkett, late Governor of New Zealand; Admiral Sir Harry Rawson, late Governor of New South Wales; and Sir Norman MacLaurin, Chancellor of the University of Sydney, are patrons of the Congress.

Officers of the Congress.

In addition to Dr. Antill Pockley, the following are the officers of the Congress: Treasurer, Dr. S. H. MacCulloch, Sidney; General Secretary, Dr. Arthur Palmer, Elizabeth Bay; Associate Secretary, Dr. A. J. Brady, Sydney; Vice-Presidents, Dr. J. C. Verco, President Adelaide Congress, 1887; Sir P. Sydney Jones, President Sydney Congress,

1892; Dr. F. C Batchelor, President Dunedin Congress, 1896; Hon. G. H. Butler, President Hobart Congress, 1902; Professor E. C. Stirling, President Adelaide Congress, 1905; Professor H. B. Allen, President Melbourne Congress, 1908; Surgeon-General W. D. C. Williams, Director-General of the Army Medical Services of the Commonwealth, Melbourne; Fleet Surgeon V. Gunson Thorpe, Senior Naval Medical Officer, Australasian Station; Fleet Surgeon F. Falconer Hall, late Senior Naval Medical Officer, Australasian Station.

Sections.

The work of the Congress will be distributed among twelve sections as follows: Medicine—President: Dr. W. T. Hayward, Adelaide. Surgery—President: G. A. Syme, Melbourne. Obstetrics and Gynaecology—President: Dr. G. Rothwell Adam, Melbourne. Anatomy, Physiology, and Pharmacology—President: Dr. E. H. Embley, Melbourne. Pathology, Bacteriology, and Tropical Medicine—President: Dr. Wilton W. Love, Brisbane. Public Health and State Medicine—President: Dr. James W. Hope, Fremantle. Ophthalmology—President: Dr. J. W. Barrett, Melbourne. Psychological Medicine and Neurology—President: Dr. W. Beattie Smith, Melbourne. Diseases of Children—President: Dr. A. Jeffreys Wood, Melbourne. Naval and Military Medicine and Surgery—President: Colonel C. S. Ryan, Melbourne. Dermatology, Radiology, and Medical Electricity—Presidents: Drs. H. F. Lawrence and F. J. Clendinnen, Melbourne. Laryngology, Rhinology, and Otology—President: Dr. W. L. Robertson, Brisbane.

State Secretaries of Congress.

The following are the State Secretaries of the Congress:—Victoria: Dr. Arthur Jeffreys Wood, Melbourne. Queensland: Dr. Wilton W. Love, Brisbane. South Australia: Dr. John B. Gunson, Adelaide. Tasmania: Dr. Gregory Sprott, Hobart. West Australia: Dr. A. J. H. Saw, Perth. New Zealand (South Island): Dr. Stanley Batchelor, Dunedin; (North Island): Dr. W. E. Herbert, Wellington.

AUTOMOBILES FOR MEDICAL MEN.

Tyre Tubes and Covers.

THE Challenge Rubber Mills Company, whose London offices are in Eagle Wharf Road, City Road, N., is making an offer which seems worth attention. It invites readers to send it any tube covers which in their present condition are unfit for use. If such covers are in the firm's opinion unfit for retreading, it will itself supply, without charge, secondhand covers of the same size and grade, and use them for the purpose of producing retreaded covers. For the whole job it will charge what it claims to be less than the prices demanded by other firms merely for retreading. Dissatisfaction with retreading the firm holds to be due to the fact that many makers attempt to retread tyres which are too far gone for satisfactory results, and use retreading compounds which they buy, and with the precise nature of which they are not really acquainted. The Challenge Rubber Mills Company makes its own compound, which is a pure Para rubber mixture, and as it will not apply it to any cover which is too far gone, it makes the offer in question in order that readers may have an opportunity of proving for themselves how much the cost of motoring, created by tyre troubles, can be reduced if the work is put in their hands.

To the device from which the firm derives its name we drew attention soon after it was brought out, but take this opportunity of mentioning that the Challenge Reinforced tube has since then been still further improved. In addition to the two-ply fabric which is embedded in the rubber for four-fifths of the circumference of the tube, another insertion of a segmental piece of fabric, bound in Egyptian cotton, has been embodied, the outer ends of this slightly overlapping the edges of the fabric proper. It has been added for the purpose of preventing any failure of the tube at the point where the original fabric ends without interfering with the resiliency that is secured by leaving untouched the thickened one-fifth of the tube—that which enters the tube bed. There is ample testimony, derived both from official investigation by the Royal Automobile Club and private experience, to the value of these tubes. They seem to add very materially to the life of a tyre, by making it possible to run quite safely with covers so worn that in ordinary circumstances they would be deemed only fit for scrapping.

BEIT FOUNDATION FOR MEDICAL RESEARCH.

AT a meeting of the trustees of the Beit Memorial Fellowships for Medical Research, held last week, the reports by the fellows on their work during the past year, which had been considered by the Advisory Board, were approved, and the following were elected to Fellowships:

Thomas Renton Elliott, M.D.Cantab., M R C.P.Lond., who proposes to carry on a research on the pathological changes in the suprarenal glands, at the Medical School of University College Hospital.

Eric Edwin Atkin, M.B.Cantab., who proposes to investigate, in the Bacteriological Laboratory of the London Hospital, a group of toxins with respect to the manner of destruction, mode of neutralization by antibody, and effect of the various modifications upon the animal organism.

Frances Mary Tozer, B.Sc.Lond., who will investigate, in the Physiological Laboratory of the Liverpool University, the presence of sensory fibres in the third, fourth, and sixth cranial nerves; their influence upon ocular paralysis in locomotor ataxia and other diseases, and the site of the ganglion cells.

Richard Williams Harold Row, B.Sc.Lond., who will inquire into the structure, development, and functions of the pituitary body in vertebrata. The research will be carried on in King's College, London, the Marine Biological Association's Laboratory, and the Naples Zoological Station.

Henry Priestley, M.B., Ch.M., Sydney, who, at the Lister Institute of Preventive Medicine, will study the diphtheroid organisms with regard to their distribution, morphology, cultural characteristics, pathology, and relationship to diseased conditions of man and animals.

Frederick Perera Wilson, M.D., M.Sc., Liverpool, who, in the Bio-Chemical Department of the University of Liverpool, will investigate the changes in the lipoids of the tissues produced by syphilis and their relation to haemolysis and immunity.

Arthur Gurney Yates, M.D.Edin., who will study the bacteriology of acute rheumatism in the Pathological Department of the University of Sheffield.

Annie Homer, D.Sc., T.C.D., who proposes to investigate the following subjects in the Physiological and Chemical Laboratories, Cambridge: The chemistry and physiology of tryptophane; the metabolism and chemistry of haemoglobin in so far as they bear on its production in the animal body; the comparison of normal and pathological tissues as regards their content of intracellular ferments.

Frederick James Fitzmaurice Barrington, M.B., B.S.Lond., F.R.C.S., who will investigate the functions of the male accessory genital glands in University College Medical School.

John Foster Gaskell, M.B., B.C.Cantab., M.R.C.P.Lond., who proposes to investigate the origin of the suprarenal body in the invertebrates and lower vertebrates, and the function of chlorogogen cells in invertebrates. The research will be carried on at St. Bartholomew's Hospital Medical School.

Professor C. S. Sherrington, F.R.S., of Liverpool, and Dr. William Bulloch, Director of the Bacteriological Laboratory of the London Hospital Medical School, were appointed members of the Advisory Board.

The next election of Fellows will be held in December, 1911. The last date for receiving applications from the Colonies and abroad is October 1st, 1911, from Great Britain and Ireland November 1st, 1911. Communications should be addressed to the Hon. Secretary, Beit Memorial Fellowships for Medical Research, 35, Clarges Street, London, W.

DR. DAVID SUTTEE, who for the last fourteen years has been medical officer to the Birsay, Harray, and Sandwick Medical Association, Orkney, was on December 1st, on the occasion of his leaving for Glasgow, presented with a purse of sovereigns in appreciation of his faithful services. Mrs. Suttee, who had been organizer of the nursing scheme, received a similar token of respect.

MR. BENJAMIN C. BROOMHALL, F.R.C.S., L.R.C.P., has received the King's permission to accept the Imperial Chinese Order of the Double Dragon, Third Class, First Division, conferred upon him by the Emperor of China in recognition of valuable services rendered by him. Captain Howard Ensor, D.S.O., R.A.M.C., has received the Royal permission to accept the Imperial Ottoman Order of the Fourth Class, conferred upon him by the Khedive of Egypt in recognition of his valuable services.

British Medical Journal.

SATURDAY, DECEMBER 17TH, 1910.

THE HYGIENE OF SLEEP.

No subject can be of greater importance than the study of the condition we call sleep. Like so much else we possess, its real value and the causes which lead to its imperfection interest us only when it is no longer our own possession. To the physician, however, interest in the subject is a present and permanent necessity, for disturbance of sleep—insomnia—is a ghost constantly stalking amongst his patients with a variability in etiology which, if imperfectly understood, may lead to faulty treatment.

With the progress of thought there has come a growing curiosity on the part of the layman to know more of the physiology and pathology of life, and we find a ready public, judging at least by the reports of meetings in the daily press, who are only too glad to learn more of what medical science can teach of everyday life in so far as it can tell how best to avoid and so prevent calamities which, when once initiated, prove themselves to be irremediable at the hands of medicine. We have even been, perhaps, a little overdone of late years with the "crusade against consumption" and kindred topics; our public conveniences are plastered over with the latest virtues of fruitarian and other diets, and the cellularity of our clothing is made to assume an importance unknown to our fathers.

Looking at this subject of the hygiene of life in the abstract, and without paying too much attention to absurdities which are bound to attach themselves to any movement, no sensible person could be found amongst laymen or laywomen, and certainly none should be found in medical circles, who would object to simple lessons, whether physiological or pathological, being given to the public with open-handed freedom. Every encouragement should be given to the dissemination of principles which he who runs may read. But the mouthpieces of the movement must be well chosen, for nothing is more likely to eradicate from our national thought the idea that science is humbug writ in a different way than a clear exposition of its truths. In the October number of *Science Progress* there is an article written on the relations of insomnia to types of sleep, by Dr. David Fraser Harris, Lecturer in Physiology in the University of Birmingham, and a rather more popular article on the physiology and hygiene of sleep has reached us, being the annual public lecture on "The Laws of Health" delivered at the Midland Institute, Birmingham, by the same physiologist, on September 16th. The thesis of both these contributions is that if we but knew what are the fundamental processes upon which sleep depends, we should also know how insomnia might be produced by any cause which militates against their due operation. Sleep is not a state dependent upon one cause any more than "public opinion" is the result of any one influence that may be operating upon men's minds. Dr. Harris has, in a clear exposition, shown that the causes of sleep are at least four in number, and in speaking of sleep, he adopts a broad view and includes all those states of loss of consciousness which, when effected by causes which are of natural origin and of normal intensity, are physiological in type, and when they lose this physiological character become pathological. He shows most clearly that if the flow of blood to the brain is short-circuited, so that its blood supply is lessened, sleep may ensue, and that when this short-circuiting is effected by agencies which are abnormal, then pathological sleep or coma is the result. The unwisdom, then, of attempting mental or bodily work shortly after a meal which attracts blood to the splanchnic or digestive area is apparent, just as it is also not necessarily unwise to have a heavy meal shortly before retiring to sleep, *pace* the advice of past teaching. In the former case, mental or muscular effort is hampered by the want of blood in the organs thus dragged into function; and in the latter, the anaemia of the brain produced by the operation of the digestive tissues is just one of the effects which it is desirable to secure to induce sleep. The meal, of course, must not be an injudicious one, which, by producing discomfort in the process of sleep-digestion (Pavlow), disturbs such sleep, and in the awakening moments leads to the development of dreams or nightmares.

Discussing a second factor in the causation of sleep, Dr. Harris touched upon a matter which is of vital importance to the national health, and more especially to that part of the national life which is spent in large cities. Sleep may be induced by the diminution or absence of sensory stimulation arriving through such channels as the eye, hearing, or common sensation. No doubt we can get over the almost day-like illumination of many a town or city bedroom by the use of blinds at night, but how can we with the "open window" shut out the fiendish noises which are created alike by cats and dogs, and by the bawling rowdy boys and girls who, to their own undoing as well, are allowed to make night hideous? Dr. Harris is quite right when he points out that in our slavish worship of "freedom of the subject" we tolerate a licence to make these unnecessary noises in our public thoroughfares. These acts of rowdyism should be treated as misdemeanours as rigorously as any other public nuisance.

A third factor in the production of sleep is the relative diminution of psychic activity. Not only is sleep impossible to the child after the excitement of a party or a pantomime, but in the same way insomnia is one of the frequent possessions of those who, by necessity or by custom, pursue mental work to within a few moments of the hour of retiring. A certain well-known divine, who was asked how he managed to preserve his health and vigour to a ripe old age, explained it on the ground that at 10 p.m. he refused to worry about anything. And, lastly, Dr. Harris brings to our notice the physiological belief that sleep in its periodic recurrence in the night hours—a recurrence which in a normally balanced individual persists in some cases undisturbed throughout life—may be but an expression of chemical influences which, hitherto unsuspected, have at last been given their due prominence. Perhaps far too much has been said of the periodic activity of our nerve centres, which, on the one hand, are capable of producing the rhythmic discharge of cardiac energy familiar to us all at least in the pulse-beat, and on the other, by rhythmic reservation of energy, bring about

that filling of the capillaries of the skin which is held by some to be such a regular accompaniment of sleep. The tendency of modern thought is to view these recurrent changes rather as the effect of recurrent causes, such as the manufacture in unknown recesses of the body of "fatigue toxins." Sleep, then, becomes but an expression of the relative increase or concentration of these suspected but undemonstrated agencies, and insomnia may, in the absence of the other three groups of causes, be merely due to an absence, or, curiously and yet truly enough, to an excess of them.

It is well the public should receive such lessons as those of Dr. Harris, for then they will find their own salvation in the way of insomnia and the use of such homely remedies as "hot bottles to the feet" or of woollen sheets, the taking of a cup of milk on occasions of sleeplessness, or the obtaining of a period of mental quiet before retiring to bed, or the due exercise of the body as a part of the day's duties will become more widespread. When all such remedies fail, then it remains for the physician to choose such agencies as will combat the difficulty, supposing the cause cannot be removed, and in the pathological conditions which also give rise to insomnia he will be a wise physician who seeks rather as a first duty the removal of the cause where it is possible, and failing this betakes himself to the particular sedatives which suit the case.

As Dr. Harris no doubt would say, his mission was the instruction of the layman and not the medical man in matters which are so vital to his welfare. We are sure that no intelligent person could read his recent utterances without deriving from them lessons which, if but acted upon, would often lead to his losing the particular form of insomnia from which he suffers.

A FRENCH VIEW OF "606."

IN an important communication made to the Academy of Medicine of Paris on November 15th, Professor Gaucher related his experiences of the Ehrlich-Hata remedy which, thanks to the lay press, is so well known as "606." Professor Gaucher has gone the right way to work about it, for the new arseno-benzol compound has been dealt with from all points of view. Before beginning to employ it, the chemistry, toxicology, and the pathological and physiological action of "606" were tested by MM. Desmoulière and Paris, and by M. Camus. As regards the chemistry, M. Desmoulière found that the quantities of arsenic, nitrogen, and chlorine did not correspond with those put forward in the formula. This is an interesting point. The pathological and physiological details of the experiments on animals cannot be dealt with completely here, and the experiments were not, in fact, sufficiently numerous to give any finality to the conclusions arrived at. Suffice it to say that in the animals (eleven guinea-pigs) that succumbed visceral congestions and haemorrhages were found. Blood pressure in animals was studied by M. Camus after intravenous and other injections. The general circulation and vasomotor apparatus were not much affected. When intravenous injections were employed, somnolence, vomiting, and respiratory changes were observed. Injections into the cerebro-spinal spaces were followed by death. When very small doses were used a period of latency preceded the fatal symptoms; during this latent period the animals presented no special symptoms of intoxication. The conclusion is that the compound is toxic to the nervous system. In addition to these investigations, the clinical application to man, under the supervision of Professor Gaucher, was carried out publicly at the Saint-Louis Hospital before a number of medical men, French and foreign, by M. Emery, who did the injections with 606 Hy, obtained directly from Professor Ehrlich. He was assisted by MM. Joltrain, Jacob, and Guggenheim. The ophthalmological examinations were in the hands of M. Antonelli. Professor Gaucher points out that only those patients who requested, and in writing, that "606" should be used were treated in this way.

The relative non-toxicity in man is admitted, but relapses were in some cases observed, whilst in others the results were *nil*. On the other hand, a markedly beneficial effect was observed in ulcerating lesions, especially superficial lesions, of the skin and mucous membranes. Rapid cicatrization occurred in many of the cases of this type, but not in all. It may be observed that the doses of "606" employed were not apparently maximum ones; but in the case of hospital patients, who are not usually up to the mark from the point of view of nutrition and weight, it was no doubt considered safer to keep to medium doses. Nevertheless it is a point to be borne in mind.

Professor Gaucher concludes, from his personal observations and as a result of this investigation, carried out in a public hospital service, that "606" does not cure syphilis, nor does it prevent relapses and recurrences, even when the specific manifestations disappear, in some instances rapidly, for the time being. When "606" acts beneficially, it does so more rapidly than mercury. Moreover, when the latter has failed, "606" may clear up syphilitic lesions very quickly. These good results may in some instances be temporary only. In some cases which had resisted mercurial treatment, "606" also remained inefficacious. Professor Gaucher considers that arseno-benzol is not satisfactory when there are visceral complications, and may even then do harm. Finally, he expresses the opinion that mercurial treatment must have priority over "606," the latter being kept in reserve for use in patients intolerant of mercury, or when the latter has failed.

RESIGNATION OF THE STAFF OF NEWCASTLE INFIRMARY.

THE announcement in the daily press of the resignation of the honorary staff of the Newcastle-upon-Tyne Royal Victoria Infirmary must have come to many as a surprise; but it appears that for some time past there have been signs of disagreement between the House Committee and the staff. The climax was reached a few days ago, when a printed report was presented by the chairman of the In-patients Committee which the honorary staff considered contained allegations against its integrity. The staff, therefore, felt that it could not allow the report to be adopted without protest. The protest having been disregarded, the entire staff has resigned. As the resignation at the time of our going to press had not been considered by the House Committee it is impossible at this stage to foretell how events may turn out. Much of the difficulty has arisen from the manner in which in-patients are admitted. For delays in the admission of patients the great demands upon the accommodation are partly to blame. It is alleged by the chairman of the In-patient Admission Committee that the rules for the

admission of patients are almost entirely ignored, and that every member of the honorary staff acts as his own admission officer; in view of the delays in admission applicants are said to have turned to working-men governors and besought them to use what influence they could to get them admitted without delay. It is also alleged that favouritism has been shown to patients who had, on their own initiative or in conjunction with their medical practitioner, previously consulted members of the honorary staff. These and other equally uncalled-for statements in the report the members of the honorary staff have resented, and, failing to have them withdrawn, they have in a body resigned.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

SIR ALFRED KEOGH, K.C.B., presided at the autumn dinner of the Irish Medical Schools' and Graduates' Association on November 23rd. Despite the weather the company numbered over a hundred, those present including Mr. P. Brady, M.P., Dr. Mouillot, Surgeon-General W. L. Gubbins, and Mr. S. J. Duncan. The toast of the evening, that of "The Association," was in the hands of the Mr. Duncan, who referred to the disabilities under which men with Irish medical qualifications laboured, these qualifications being esteemed less highly in the free and open market than those derived from universities and medical schools in other parts of the United Kingdom. It was only in the medical profession that this Irish grievance existed. In the law, particularly at the Bar, the man with Irish qualifications was esteemed fully equal to the man from the English or the Scottish university. Moreover, the fact that medical training in Ireland was fully as efficient as medical training anywhere else was proved by the number of Irishmen who had obtained first-class positions in the army and navy medical services. This was surely, he said, a supreme test of capacity. Sir Alfred Keogh, replying to the toast, also referred to these disabilities, but he said that they were rapidly disappearing and he looked to a time, not far distant, when full appreciation would be given to qualifications obtained in Ireland. The toast of "The Guests," proposed by Dr. H. Macnaughton-Jones, was acknowledged by Mr. P. Brady, M.P., who took occasion to congratulate the medical profession not only on its devotion, but on a certain faculty of concentration which members of other professions often lacked. The great and solid work done by medical men was due in no small measure to the fact that they had not frittered away their energies upon outside interests having no relation to their special work. The final toast was "The President," which was accorded musical honours. In responding, Sir Alfred Keogh said that although drawn from all Ireland, and widely divided in religion and politics, no differences due to those subjects disturbed the harmony of the association.

THE EHRLICH-HATA REMEDY.

DURING the past few weeks the leading medical journals in Germany have published a large number of new articles on the action of Ehrlich-Hata's remedy for syphilis. With certain reservations—important reservations, no doubt, as will be seen—the general results of the continued observations with this drug agree with those expressed in the earlier articles. Each author speaks of extraordinary symptomatic improvement, of rapid clearing-up of threatening signs, and of wonderful healing processes. Relapses and recurrences of symptoms figure but sparsely in these new reports, and it is stated that no accidents or serious ill effects follow the use of the medicament. Before the effect on cases of syphilis is examined more closely a brief reference to two articles should be made. In the first Professor Gerber[1] deals with the power of "606" in clearing off the spirochaetes of the mouth. He found in 3 carefully observed cases that the remedy had a distinct destructive influence on the spirochaetes of the mouth, and further that at first a parallelism existed between these spirochaetes and the *Spirochaeta pallida*, as far as the effect of "606" on them was concerned. He suggests utilizing this action as a criterion of the effect which the drug is exercising on the syphilitic parasite within the organism. The second article is one by Dr. M. Gioseffi, of Trieste,[2] who reports that after studying a case of leprosy treated with the Ehrlich-Hata remedy, in which the Wassermann reaction was strictly negative from the first, no influence was noted on the course of the disease, and nothing approaching the granular degeneration of the bacilli like that described by Ehlers could be discovered. A number of authors—Montesanto,[3] Hausmann,[4] A. Geronne,[5] Gennerich,[6] and Touton[7]—advocate intravenous medication, either associated with subcutaneous injections, or alone. The idea is that it is desirable to act as energetically on the syphilitic parasite or its products as possible, while to a smaller extent the fact that the intravenous application is painless also influences some clinicians. Pasini[8] advises giving the drug in suspension in *adeps lanae anhydricus* and *vaselinol*. The method which he describes appears to be somewhat cumbrous, and not likely to gain popularity. In regard to the dangers and ill effects of the intravenous injections, there is almost complete agreement. A general reaction takes place in a certain number of cases, but this is not of consequence provided the patient is not suffering from advanced disease of the central nervous system or of the arteries, or from severe forms of diabetes. The reaction at times is somewhat alarming, but passes off rapidly. Several authors, including Treupel,[9] Willige,[10] Frenkel-Heiden,[11] Touton,[12] and others, record excellent results obtained in syphilis of the central nevous system. The majority find that only symptomatic improvement occurs in tabes, and that not more is to be expected from treatment by "606" than from treatment by mercury. Still more emphatically do some authors, such as C. Hirsch,[13] extol the remarkable results obtained in syphilitic processes of the eye, while Kowalewski[14] speaks of the occurrence of optic neuritis, as a recurrence of the syphilitic process after the injection of "606." Chrzelitzer[15] has nothing but good to report as to the action of the drug, while H. Ritter[16] speaks in scarcely less favourable terms. K. Zieler[17] is less enthusiastic, but regards Ehrlich's preparation in many respects as more active and more powerful than mercury. Hecht[18] considers that the drug does not act only by killing the spirochaetes, but that it stimulates the organism to produce protective substances, and assists it to battle against

[1] Gerber, *Deut. med. Woch.*, No. 46, 1910.
[2] Gioseffi, *Muench. med. Woch.*, No. 48, 1910.
[3] Montesanto, ibid., No. 49, 1910.
[4] Hausmann, ibid., No. 48, 1910.
[5] Geronne, *Berl. klin. Woch.*, No. 49, 1910.
[6] Gennerich, ibid., No. 46, 1910.
[7] Touton, ibid, No. 49, 1910.
[8] Pasini, *Muench. med. Woch.*, No. 47, 1910.
[9] Treupel, ibid., No. 46, 1910.
[10] Willige, ibid.
[11] Frenkel-Heiden, *Berl. klin. Woch*, No. 45, 1910.
[12] Touton, loc. cit.
[13] Hirsch, *Muench. med. Woch.*, No. 49, 1910.
[14] Kowalewski, *Berl. klin. Woch.*, No. 47, 1910.
[15] Chrzelitzer, *Muench. med. Woch.*, No. 48, 1910.
[16] Ritter, ibid., No. 43, 1910.
[17] Zieler, ibid., No. 47, 1910.
[18] Hecht., ibid,, No. 49, 1910.

the infection. Munk[19] comes to the conclusion that the substances on which the Wassermann reaction depends are not produced by the living spirochaetes, but in all probability by their disintegration products. "606" has no effect on these substances. It follows, therefore, that the Wassermann reaction in general terms cannot reveal the effect of the injections of "606" until at least six or eight weeks have passed. Rosenthal[20] strikes a warning note against exaggeration. He and some others have come to the conclusion that the remedy does not effect a sterilization of the body in respect of spirochaetes after one injection. Most of the writers believe that symptomatic cure can be gained by repeated injections, and Gennerich[21] frequently follows the injection up with a few calomel injections. That only with repeated injections can syphilis be definitively cured by "606," if at all, appears to be the opinion of several, while Hecker[22] goes even so far as to utter a note of warning against acceptance of the optimistic belief that "606" cures syphilis. Some urge the employment of local remedies as well as the injections. Finally, all who have had large experience are inclined to express themselves with caution as to the ultimate result of the present method of applying the remedy. Nevertheless, the vast majority of observers still hold that Ehrlich has done the highest service in introducing another powerful remedy for syphilis, which is doubtless of great value in special cases. A French view of the effect of the remedy will be found in the Paris Letter (p. 1942); reference is also made to the subject in a leading article which appears on p. 1932.

THE DESTRUCTION OF RATS.

THE Board of Agriculture and Fisheries has just issued a leaflet (No. 244) on the destruction of rats. It is pointed out that the females, both of the black rat and the brown or sewer rat, breed at a very early age. Though they go with young for six weeks, they have several litters in a year, comprising from six to fourteen young. Apart from their capacity of communicating plague to man through the fleas by which they are infested, the damage done to food and houses warrants the destruction of these animals by hunting, trapping, or the use of poisons or rat virus. Of the poisons, barium carbonate is said to be one of the cheapest and most effectual. It causes thirst, and therefore induces the rats to seek water in the open, where they die. It may be employed in the proportion of one part to four parts of meal mixed to a dough with water, or it may be spread on fish or moist toasted bread. It is added that rats if they find any of their fellows die after eating any kind of food avoid such food for some time, so that it is generally necessary to vary the form and appearance of the bait. Apart from the risk of prosecution under the Poisoned Grain Prohibition Act, 1863, and the Poisoned Flesh Prohibition Act, 1864, care should be taken that poisoned baits are only laid by authorized and responsible persons, their whereabouts being carefully reported. With regard to rat virus, the results are described as uncertain, owing partly to the difficulty of securing a successful infection in all cases, and partly to the fact that if only slightly infected, rats recover and become more or less immune to the disease. When it is proposed to exterminate the rats in a large district, all methods should be employed, and the attack made in a circle radiating from a spot in which it is considered that the final work of destruction can be accomplished with the least difficulty. Copies of the leaflet can be obtained free of charge on application to the Secretary of the Board of Agriculture and Fisheries, 4, Whitehall Place, London, S.W.

[19] Munk, *Deut. med. Woch.*, No. 43, 1910.
[20] Rosenthal, *Berl. klin. Woch.*, No. 47, 1910.
[21] Gennerich, loc. cit.
[22] Hecker, *Deut. med. Woch.*, No. 46, 1910.

A NEW THEORY OF MAN'S ORIGIN.

ACCOUNTS are beginning to appear in the English press of a remarkable theory of man's origin recently formulated by Hermann Klaatsch, Professor of Anthropology in the University of Breslau. He is a voluminous writer, and has contributed more than a fair share to the extensive literature descriptive of palaeolithic man which has appeared in Germany during the last ten years. As our readers are probably aware, four skeletons of palaeolithic man have been discovered in France during the last two years. With the discovery and description of two of these Professor Klaatsch was closely concerned; indeed, the theory of man's origin which he has now formulated arose from observations he made on these two ancient skeletons. The first skeleton (the Moustierien) investigated by him was of the same type as the Neanderthal man; the vault of the skull was low, the eyebrow ridges prominently developed, the face large, the impressions on the base of the skull for the attachment of the neck muscles greatly pronounced, the limb bones short, stout, and massive. The second skeleton (the Aurignac) was found in a stratum which, from the character of the palaeolithic flints and other remains of palaeolithic civilization, is counted more recent than that in which the Moustierien skeleton was found, and evidently belonged to a race which had followed the older or Neanderthaloid race. This Aurignac or newer race is much more like the modern European, the vault of the skull being high, the supraorbital ridges not pronounced, and the basal impressions for the neck muscles of the modern form and the bones of the limbs rather of a long and slender type. Professor Klaatsch was so impressed by the superficial resemblance of the Neanderthal man to the gorilla and of the Aurignac man (the human remains found at Galley Hill, near Gravesend, are of the same type) to the orang, that he has formulated a theory of double origin for the human race. The gorilla and the Neanderthal race are, he suggests, co-descendants of one branch of a basal anthropoid stock, while the orang and the Aurignac race are co-descendants of another branch. We expect a great deal from evolution, but we do not remember a theory which has made such a demand on the ingenuity of Nature, and on the ingenuousness of the scientific public, as this theory now promulgated by Professor Klaatsch. That the orang and gorilla may have diverged and become the distinct genera which they now are can be understood, and that from the basal stock of the one or the other man may have arisen, can be accepted as a working hypothesis; but that from the basal stock of two such different genera Nature could produce two stocks of men which in the process of time converged, and at last fused in one species, seems somewhat incredible. The writer who introduced this theory to English readers in a recent issue of *Nature* (November 24th, p. 120), described anthropoid apes as "unsuccessful attempts and dashes forward towards the goal of the definite creation of the human race." He had evidently in his mind some of the later literature on Arctic exploration; the theory he introduces has some resemblance to the account given by a recent explorer who claimed to have reached the Pole.

THE PATHOGENESIS OF DIABETIC COMA.

AT a recent meeting of the Berlin Medical Society (November 23rd, 1910), Professor Ehrmann referred to the commonly accepted view that diabetic coma depends upon acidosis, on the basis of the analogy thought to exist between diabetic coma and the condition of a rabbit intoxicated by the injection of a large dose of any mineral acid. In his opinion this analogy is vague, as all the symptoms of diabetic coma are not present in the acid intoxication of the rabbit; in a series of experiments performed by the reporter in association with Dr. Esser, also on the rabbit, he has succeeded in producing true coma without administering to the animal any trace of acid, but by employing sodium butyrate, a feebly alkaline compound which administered in suitable doses reproduces experimentally all the symptoms of coma, even those which are less generally known. An animal so treated becomes apathetic and unconscious, its respiration is slowed to half the normal number, its expiration is prolonged, and the respiratory waves are large. The tension of the eyeball is diminished as in diabetic coma, while the urine contains diacetic acid and beta-oxybutyric acid. The blood shows diminution of its alkalinity and of carbonic acid, but the diminution of carbonic acid is in his opinion not important in the production of coma, for it was observed in the control animals treated with substances incapable of determining coma, such as sodium isobutyrate, which is identical in chemical composition with normal butyrate and sufficiently analogous in many of its physico-chemical properties, the fact that it is impossible to cause coma by equivalent doses of isobutyrate is held to prove the specific action of butyric acid. Moreover, the rabbit is not the only animal which can be rendered comatose by its means, for as Marx has shown, it is produced also in the dog, provided the animal is young and has been fasting before the experiment. On the other hand, acid coma has only been demonstrated in the rabbit, although carnivorous animals naturally present a greater resemblance to man. In conclusion, the reporter urged that the whole question of the production of diabetic coma should be reopened.

THE RELATIVE GERMICIDAL POWERS OF SOME ESSENTIAL OILS.

ALTHOUGH many of the essential oils in medicinal use are generally regarded as possessing considerable value as antiseptics, little information has hitherto been available as to their comparative germicidal power, or their relation in this respect to other antiseptics. The fact that many of these oils contain a large proportion of bodies homologous with phenol, or otherwise closely related to it, is a sufficient justification, on chemical grounds, for ascribing antiseptic properties to them, but throws very little light on their respective values, as the relative germicidal powers of the higher phenols themselves have not been established. In a paper appearing in the current number of *The Perfumery and Essential Oil Record*, Mr. W. H. Martindale, Ph.D., gives an account of experiments carried out on the antiseptic powers of a number of essential oils of known purity, and containing known proportions of their principal constituents, and the results are of some interest, and in certain cases somewhat surprising. The method of testing adopted followed that of Rideal and Walker in its general principles, the organism employed being *B. coli communis*. Aqueous solutions of the oils were employed in one series of tests, and "saponaceous solutions" in another; the object of the latter was to provide dilutions of the oils stronger than could be obtained by merely dissolving in water, but the value of the results is diminished by the fact that no particulars are given of the composition or mode of preparation of these "saponaceous solutions," which are also referred to as emulsions. It is generally believed that when emulsions are used the germicidal powers of the emulsified substance are supplemented by the effects of the physical condition of the particles, and unless precisely similar emulsions are used in all cases (which is practically impossible with oils of different nature) the comparative results may be no criterion of the relative antiseptic powers of the oils when in solution. The bacilli were submitted to the action of the antiseptic solution for two minutes and for thirty minutes, and the results compared with those given by phenol in the usual way; the carbolic acid coefficient was calculated separately from the two minute and thirty minute tests, and the mean of these values taken. The highest activity was shown by origanum oil, which is assigned a coefficient of 25.8; the specimen of oil used contained 82 per cent. of the phenol carvacrol, but this phenol when tested alone only showed a coefficient of 21.3. Thymol had a coefficient of 19.4, and oil of thyme containing 40 per cent. of thymol, 13 to 15. Oil of cloves, which contained 90 per cent. of the phenol eugenol, only gave a coefficient of 8.9, while oils of wintergreen and eucalyptus, which are generally supposed to have rather high antiseptic value, showed respectively 4.6 and 3.5; it appears that eucalyptol is not the strongest antiseptic constituent of eucalytus oil, since its coefficient was only found to be 3.8, while a sample of oil from *E. amygdalina*, which contains less of this constituent, gave 4.3. Of all the essential oils examined—about twenty in number—oil of sandal wood showed the lowest co-efficient, namely, 1.7; of tar oils, birch tar oil gave the same figure, and oil of cade showed a coefficient below 1. In the table contained in Dr. Martindale's paper the coefficients are given to two decimal places; but as the second decimal clearly can have no significance, and the detailed results show that the first decimal figure is at best extremely doubtful, we have omitted the former in quoting the figures above.

INTESTINAL OBSTRUCTION AFTER VENTRIFIXATION OF THE UTERUS.

THE treatment of uterine displacements is still a subject about which there is great difference of opinion. Members of the British Medical Association will remember the instructive discussion on the question introduced by Dr. Herman at the Sheffield meeting in 1908.[1] Altogether, ventrifixation seems to be the most popular operation, at least as a remedy for retroflexion. In cases of prolapse few gynaecologists consider it sufficient to ensure success, but many operators practise it in combination with plastic operations on the vagina. Whether the uterus be fixed with or without the latter procedure, the possibility of intestinal obstruction must ever be borne in mind. Let us trust that cases of this complication are not allowed to fall into oblivion. Dr. Guggisberg, of Berne, has set us a good example by reporting a case.[2] He observes that, roughly speaking, there are two methods for suspending the uterus. Olshausen advocates the passage of the suture through the uterus at the point of the attachment of each round ligament,

[1] Discussion on the Treatment of Uterine Displacements, JOURNAL, vol. ii, 1908, p. 790.
[2] Darmeinklemmung nach Ventrifixation, *Zentralbl. f. Gynäk.*, No. 39, 1910, p. 1262.

the pair of sutures being made fast to corresponding points in the parietes. It would be thought that intestine could hardly slip between the parietes and the greatly shortened round ligaments, but experience shows that this formidable complication may occur. Olshausen admits one instance in his own practice, and Dr. Guggisberg reports a similar mishap. Theoretically the other method—the Leopold-Czerny operation—would appear far less safe than Olshausen's. The fundus of the uterus alone is fixed to the parietes. It is now known that a band is apt to develop which may be dragged down by the weight of the uterus, forming a *ligamentum uteri tertium*. Howard Kelly includes in his *Operative Gynaecology* a most instructive drawing of a uterus as seen a year after suspension. In that instance there were two such "ligaments," which meant failure of the object of the operation, whilst a glance at them is enough to make any one experienced in abdominal surgery shudder. Two cases of obstruction were reported some time ago, whilst more recently a third was published; in the latter resection was successfully performed. Guggisberg's experience is worth remembering. He operated last February on a woman aged 26, who had borne six children; all her labours were complicated owing to contracted pelvis, and the uterus was retroflexed. The uterus was fixed after Olshausen's principle. A silk suture was brought three times round each round ligament at its uterine insertion and passed through peritoneum, muscle, and fascia, its ends being tied against the fascia. The Fallopian tubes were excised in order to sterilize the patient. Within five months this patient was readmitted into hospital as an emergency case. Acute symptoms had come on a few hours earlier, when the patient was pushing a heavy perambulator, but there had already been signs of obstruction. On opening the abdomen over 11 in. of small intestine, deeply congested, were found to have slipped between the round ligaments and the parietes. Yet those ligaments still remained fixed to the parietes at their uterine attachment, just as they had been sutured. The adhesions were divided and the bowel replaced; resection was not deemed necessary, as peristalsis was not abolished, and the patient was saved. Dr. Guggisberg dwells on several modifications of ventrifixation, but they are well known to our readers, and more than one British authority has devised methods which Continental writers seemed to have overlooked. It is clear that the round ligaments may become stretched below the point of fixation, sufficiently to allow intestine to slip under the points of suture, and that is the essentially important feature in Dr. Guggisberg's report.

NON-TUBERCULOUS PYOSALPINX IN VIRGINS.

SCIENTIFIC gynaecology is a plant of very recent growth, but it has already borne fruit. Perhaps its cultivators have trumpeted the virtues of its produce a little too loudly, but they can tell of other matters than radical operations for uterine cancer and the precise indications for Caesarean section. The close relation of suppuration of the Fallopian tube to abortion, puerperal complications, and gonorrhoea has been well established. Pyosalpinx is also associated with tubercle. Comyns Berkeley and Dymock Turner verified this long-suspected fact when they showed that in a large proportion of necropsies on subjects who had died of phthisis in the Brompton Hospital the Fallopian tubes were infected with tubercle. Cullingworth, on the other hand, was among the first to teach, on the ground of long clinical and pathological research, that tubal disease in virgins is usually tuberculous. It has been felt that such a statement requires scrutiny, for tuberculosis is, on ethical grounds, uncompromising when it occurs in single women, whilst the case is quite otherwise in respect to any pathological condition where the gonococcus or germs associated with the puerperium are essential factors in its production. A non-tuberculous pyosalpinx, however, it is now known, is not always a sequel of pregnancy or gonorrhoea. The close relation of appendicitis to tubal disease has been recognized for over twenty years, and Loewenhart recently collected reports of instances in which the tube became inflamed although the vermiform appendix had not suppurated. Bégouin of Bordeaux discussed the subject of non-tuberculous pyosalpinx in the virgin at the recent meeting of a medical association at Toulouse.[1] His experience about appendicitis and pyosalpinx agreed with Loewenhart's records, but he surprised an actually suppurating appendix *flagrante delicto*. The patient was 15, and suffered from a characteristic attack of suppurative appendicitis; the appendix was in contact with the right Fallopian tube, which was thickened, and pus oozed from the ostium on pressure. Bégouin, however, observes that this type of secondary salpingitis is unilateral, and the tube is rarely closed, so that there is no true pyosalpinx. Further experience led him to consider that there may be a primary bilateral pyosalpinx in a virgin. A single lady aged 33 came under his care for recurrent appendicitis. He operated and found the appendix the seat of simple inflammation of its mucosa and muscular wall, without any periappendicitis, nor did the appendix touch the Fallopian tubes. Yet there was double pyosalpinx, the tubes being as big as Tangerine oranges. No trace of tubercle could be detected and no germs, at least no aërobic microbes, were discovered. The patient recovered from the operation for removal of the diseased parts and has been free ever since from any clinical evidence of tuberculosis. Bégouin admits that this case is not absolutely clear, nor will others feel certain that the appendix might not have been to blame during some earlier attack of inflammation. A second instance of pyosalpinx under his care seemed more authentic. The patient was a young lady aged 16, under his treatment for an attack of pelvic inflammation. She had been in perfect health, and was quite free from tubercle. Bégouin therefore suspected axial rotation of a small ovarian dermoid, for there was a mass in the pelvis. He operated, and discovered a most characteristic double pyosalpinx, and removed the uterus as well as the appendages. There was accidental infection beyond the field of operation, and severe febrile symptoms followed, but the patient one year after convalescence was in perfect health. The walls of the tubes were examined at several points, and found free from Koch's bacillus and giant cells. The pus from the tubes held anaërobic microbes in abundance, but none of any aërobic species. Bégouin was doubtful about the source of infection, but thought that it was probably of the ascending type. Both his patients had been subject to severe leucorrhoea, and the second admitted that the discharge had become fetid. Germs must have entered the vulva infecting the discharge. He supports his theory from Riedel's researches. In 49 abdominal sections for acute appendicitis performed on female children under 10 years of age, that observer discovered purulent salpingitis in no less than 9, the appendix being healthy. In 2 out of the 9, where the pus was properly examined, streptococci were detected.

[1] "Des pyosalpinx non-tuberculeux chez les vierges." Report of meeting of the Congrès National de Gynécologie, d'Obstétrique et de Paediatrie, Toulouse, September, 1910. *Annales de gynéc. et d'obstét.*, October, 1910, p. 663.

Bégouin holds that his cases represented milder attacks of the same disorder. Infection from leucorrhoeal discharge ascended the genital tract and attacked the Fallopian tubes, which fortunately became obstructed, so that peritonitis, fatal in Riedel's subjects, did not occur.

RENAL SURGERY AND PREGNANCY.

THIS interesting theme—the effects of an operation on the kidneys during pregnancy and its effects on future pregnancies—was made the subject of a discussion at a recent meeting of a French Congress.[1] Pousson of Bordeaux found that patients subjected to nephrectomy fared about as well as most women when they became pregnant. Out of 66 such cases, 59 were delivered at term, leaving but 7 miscarriages, and most of the patients suckled their children, one actually becoming a professional wet-nurse. Pinard made an important statement. Tuberculous disease of the kidney is a malady which we associate with very sickly young women. Yet it may be cured by nephrectomy, and the patient, should she conceive, may pass through a normal pregnancy. Israel has reported no less than 15 pregnancies in a series of 8 of his own cases from whom he had removed a tuberculous kidney, and declared that in none were there any of the complications of pregnancy, and that in all labour was normal. Hartmann, who quoted Israel in the course of the discussion, read an instructive communication on 113 cases of renal operations, 35 during pregnancy and 78 followed sooner or later by pregnancy. In the 35 he included Cragin's vaginal nephrectomy for the removal of a displaced cystic kidney in the pelvis obstructing labour; normal delivery occurred on the next day. In Twynam's case certain complications, hitherto absent, made the induction of labour necessary three weeks after a nephrectomy. Twenty-six more nephrectomies during pregnancy were included; 2 proved fatal, but one patient had uronephrosis and died of eclampsia on the second day, and the other had phlebitis already before the removal of the kidney. Out of the remaining 24 the pregnancy continued till term in no less than 22. In 4 out of 5 nephrotomies in pregnancy gestation continued to term, but the remaining case died on the second day after premature labour. One nephropexy and one incision into a perinephritic abscess during pregnancy were not followed by premature delivery or any other complications. Hartmann also recorded his collection of 78 cases where pregnancy followed renal operations. Out of 74 nephrectomies 72 became pregnant to term from one to four times and 2 aborted. Two only died in the puerperium, one with eclampsia, the other with anuria, without convulsions; thus, in seventy instances a single kidney did very well throughout gestation, which was sometimes repeated. Out of three women who had undergone nephrotomy, one had a miscarriage, one became pregnant twice to term, and one three times, also to term on every occasion. The last case was a bilateral decapsulation, and it is interesting to bear in mind that the patient afterwards became pregnant once, and was delivered at term. A good special report of the after-histories of patients treated after Edebohls's method is much to be desired. What supplies the place of the capsule, and how does the deputy capsule answer in respect to the renal functions? Altogether, renal surgery seems distinctly favourable to normal gestation.

[1] Report of the Congrès National de Gynécologie, etc. Toulouse. 1910. *Annales de gynéc. et d'obstét.*, October, 1910, p. 674.

LEBANON HOSPITAL FOR THE INSANE, ASFÛRIYEH.

IN this week's SUPPLEMENT (page 458) is printed an abstract of the annual report of Dr. H. Watson Smith, the Medical Superintendent of this international, Christian and philanthropic institution, which was founded by Theophilus Waldmeier, and opened in August, 1900. Till then there was no asylum in the whole of Palestine, nor, indeed, between Constantinople and Cairo. Beliefs in devil-possession prevailed, and to this day, Mr. Waldmeier says, there are no other words for mental diseases than *sikuy* (possessed) and *majnoon* (demon-possessed). Exorcism was practised, the patients kept bound in chains, and closely confined in convents and elsewhere. For the history of this beneficent institution we would refer readers to the successive annual reports, which may be obtained from the Secretary of the Lebanon Hospital for the Insane, 35, Queen Victoria Street, E.C.; but, as showing the growing estimation in which the work is held in Syria, it may be mentioned that the receipts for patients have risen from £153 for the year 1900–1 to £2,007 for the year 1909–10. Side by side with this increasing appreciation of its value, however, the demands made upon the institution are growing also. As Dr. Sandwith said at the last annual meeting, the asylum can never become self-supporting unless it become a private institution for the wealthy instead of for the poor. As it receives no financial help from the State, it is likely to remain largely a charitable institution, and as such we cordially commend it to the notice of our readers.

"LOCAL ANAESTHETICS IN DENTAL SURGERY."

IN a paragraph under this heading published in the JOURNAL of November 26th, page 1734, discussing a recent action at the Bolton County Court, it was stated that the witnesses for the defence "maintained that neither the preparation of the gum nor sterilization of the instruments was either necessary or usual." We are informed that the medical witnesses for the defence did not take up this position, and did not state that the sterilization of the instruments was neither necessary nor usual. We have therefore to express our regret that the statement above quoted, which we are satisfied is incorrect, should have appeared in the JOURNAL.

GENERAL ELECTION.

MEDICAL MEMBERS OF PARLIAMENT.

THE following are among the list of successful candidates possessing medical qualifications whose elections have been announced up to the time of going to press:

England.

*Dr. Christopher Addison (L.), Hoxton.
*Mr. C. H. Dixon (U.), Boston.
*Sir G. H. Pollard (L.), Eccles.
*Sir R. J. Price (L.), East Norfolk.
*Sir G. Scott Robertson, K.C.S.I. (L.), Central Bradford.

Scotland.

*Dr. W. A. Chapple (L.), Stirlingshire.
*Sir Robert Finlay, K.C. (U.), Edinburgh and St. Andrews.
*Dr. A. R. Rainy (L.), Kilmarnock.

Ireland.

*Mr. J. Dillon (N.), Mayo East.
*Mr. A. Lynch (N.), West Clare.

* Represented the same constituency in the last Parliament.

England and Wales.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

LONDON.

MEDICAL TREATMENT OF LONDON SCHOOL CHILDREN.

As briefly reported in the last issue of the BRITISH MEDICAL JOURNAL (p. 1881) the Education Committee of the London County Council discussed on December 7th a report in which some particulars were given with regard to the working of the Council's scheme for medical treatment through the agency of the hospitals. The report, and the discussion upon it, are of sufficient interest to be given in greater detail.

The Children's Care Subcommittee stated that the agreements with the six hospitals which were the first to accept the Council's scheme would expire during the Christmas recess. The promise to submit a report in which the first year's working of the scheme would be reviewed in the light of the experience gained, had not been forgotten, but most of the agreements with the hospitals fell far short of a year, and sufficient time had not elapsed to enable a considered judgement to be formed upon the merits of the scheme. A section had the question under consideration, and would report later. Meanwhile it was necessary to deal at once with the renewal of the agreements with the Belgrave Hospital for Children, the Charing Cross Hospital, the Hospital for Diseases of the Throat, the London Hospital, Metropolitan Ear, Nose, and Throat Hospital, and the St. George's Hospital. The subcommittee was not able to give full particulars as to the attendance of the children at these hospitals, but from a sample of cases taken at random it appeared that upwards of 85 per cent. of those who attended continued attendance until they were discharged. It was probable that a proportion of the remainder obtained treatment, but, not presenting themselves at the hospital, were returned as having ceased attendance before being discharged.

Amendments of the Hospital Agreements.

The subcommittee went into detail in regard to the agreements with each of the six hospitals. The Belgrave Hospital promised to provide treatment of 880 eye and 880 ear, nose, and throat cases during the year. During the period the agreement had been in force just over 500 cases had been treated in each department, but 670 cases should have attended in each department after making allowance for holidays. The subcommittee thought the governing body should be asked to regard its present number of cases as the minimum, and to be prepared to treat further cases up to a maximum of 2,640, or twice as many as at present. Charing Cross Hospital undertook to treat 1,000 eye, 1,000 ear, nose, and throat, and 200 ringworm cases. So far, 1,104 children had attended, and the full number who should have attended was 1,734. Although this hospital was central and easily accessible, there were within a reasonable distance other hospitals, not included in the Council's scheme, where free treatment was available, and to these many parents had had recourse. In this case the subcommittee recommended a reduction in the number of cases to be referred to the hospital to 500 ear, nose, and throat, 440 eye cases, and 200 ringworm cases. At the Hospital for Diseases of the Throat the Council had paid 4s. for each case. There was no provision in the agreement as to numbers nor as to the payment of the medical staff. It was provided, however, that the staff should be qualified. Between January 24th and October 31st, 1910, 131 children attended, and it was estimated that from 100 to 200 would attend annually. As parents in this district had a wide choice of hospitals, at some of which free treatment was given, no number should be guaranteed to this hospital. At the London Hospital, between January 17th and October 31st, 2,150 children attended the ophthalmic department, 1,331 children in the ear, nose, and throat department, and 198 children in the skin department; total, 3,679. The agreement with the hospital provided for 3,654 cases in this period. This hospital was available for an extensive and thickly-populated area of very poor people, and there was no difficulty in securing the attendance of large numbers of children. In the aural department there was at present a large waiting list. The subcommittee estimated that in this district 9,600 children would require treatment for ear, nose, and throat ailments; 3,800 for affections of the eye; and 950 for skin diseases. The governing body of the London Hospital should be asked to arrange for the treatment of a minimum of 3,000 ear, nose, and throat cases, 3,000 eye cases, and 250 ringworm cases annually, and for the treatment of further ear, nose, and throat cases up to a maximum of 6,000. The present agreement should continue until the hospital was prepared to deal with the whole or part of the increase. At the Metropolitan Ear, Nose, and Throat Hospital, which agreed to take cases up to a maximum of 500, 222 children had attended so far with the Council's voucher cards. The governing body of the St. George's Hospital (whose agreement covered 700 ear cases, 1,100 eye cases, and 200 ringworm cases) had dealt with 1,068 children between January 17th and October 31st, and did not desire to renew the agreement, although, to avoid inconvenience to the Council, it would continue a few months longer. The King's College Hospital had also intimated that it did not desire to renew its agreement when it expired next month. The subcommittee recommended that the agreements with the six hospitals be renewed for twelve months, except in the case of the St. George's Hospital, in which six months was suggested.

Discussion.

Mr. Bray moved an amendment to renew the agreements for six months only. He strongly criticized the way the scheme had been carried out, and stated that no attempt had been made to get detailed information from the hospitals as to whether treatment had been carried out effectually. Members of the Council heard constant complaints that in certain hospitals children had been treated unsympathetically; that children had been discharged too soon and had been found bleeding in tramcars; and that children were sometimes treated by inexperienced persons. There might be nothing in these charges, but the Council could not say so because it had taken no steps to find out. Mr. Bray asked, further, whether it was not a fact that in one hospital money paid by the Council as salary to a clinical assistant had been diverted to the hospital funds.

Miss Adler seconded, and said that the recently issued report of the Medical Officer to the Board of Education contained many criticisms of the Council's scheme of medical treatment which deserved careful consideration. She believed the hospitals themselves felt the very great difficulties inherent in the present scheme; there were great irregularities in the attendance of the children at the hospitals, due to the difficulty parents found in taking them sometimes as many as three times. Sometimes, owing to shortage in the number of children the time of the doctor was wasted; if, on the other hand, too many children came some had to be sent away without treatment. She believed these difficulties could not be avoided in the hospitals' scheme, but perhaps something could be done by getting school nurses to accompany the children, and by bringing the school doctors into closer co-operation with the hospitals. Criticising points of detail Miss Adler said the committee proposed to send a far larger number of children to the London Hospital, but it did not know whether the authorities of the hospital could deal with them, and no suggestion was made that a special department should be established.

Mr. Cyril Jackson said he was sorry the information on the paper was not fuller, but there had been great pressure of work at the education offices in connexion with this scheme. He assured the committee that any complaints which had been made had no reference to the six hospitals whose agreements were at present under consideration. It would be a breach of the

initial arrangement if the agreements were renewed for six months only.

Mr. H. E. A. Cotton thought the radical defect of the whole scheme was that the Council had no right to supervise the treatment at the hospitals; he also gave some instances of children having to be taken long distances to the hospitals.

Mr. Sanders spoke strongly of the "fatal blunder" the committee and the hospitals had made in turning voluntary institutions into institutions demanding payment. A conference of workmen was about to be called with a view of starting an anti-hospital Saturday and Sunday fund agitation in London. Workmen said they contributed to various funds to the hospitals, by workshop collections and otherwise, and now when their children went to these hospitals for treatment they had to pay over again. It was a scandal that children should have to wait, as he knew they had in some cases, from 2 o'clock till 7 or 9 before being attended to. The hospitals were being put on the rates, and, as in the case of the feeding of necessitous children, it would be found that the effect of this would be to make voluntary funds dry up.

Mr. Anderton assured the committee that no complaints had been made with regard to the treatment at these six hospitals, and it was decided by a majority of six to recommend the Council to renew the agreements for twelve months.

THE BOARD OF EDUCATION AND THE COUNCIL.

It was reported at the meeting of the Education Committee of the London County Council on December 14th that two letters had been received from the Board of Education—one with reference to the reply of the Council to the Board's criticisms of the existing arrangements for medical inspection (BRITISH MEDICAL JOURNAL, October 29th, p. 1364), and the other on the proposals for beginning dental treatment at the Deptford Children's Health Centre and the Poplar Hospital for Accidents (BRITISH MEDICAL JOURNAL, October 15th, p. 1180).

Reorganization of Medical Inspection.

In the first letter the Board stated that the question whether the Council's arrangements for medical inspection were adequate and satisfactory was one which could not be considered merely in relation to the number of officers employed and the number of inspections which each officer might be able to carry out, and the Board was not yet in a position to express any considered opinion on the question. The Board reminded the Council that investigations had disclosed a great lack of that organization, direction, and control of the medical staff which was essential in dealing with the enormous area and numbers involved in the case of London schools, and particularly when the work was attempted by means of part-time school doctors. The Board could not find in the Council's reply to its previous criticisms any clear indication of the means by which the Council was remedying, or was proposing to remedy, these defects. The effectiveness of the increased staff described must depend upon the instructions under which the scheme was worked henceforward and the manner in which those instructions were observed in practice. The Board presumed, though this was not stated, that detailed instructions had been given already by the principal school medical officer to secure that the work of inspection was being regularly and continuously carried out on a definite system designed to cover the ground effectively, and that such a system was in actual operation all over London. The Board could only express the hope that when the working of the new arrangements came to be examined it would be found that the urgent needs of the metropolis in respect of medical inspection had been adequately provided for at last.

The Dental Treatment Experiment.

With regard to the proposal for dental treatment, the Board wrote that while it recognized that it was essential to proceed tentatively in attacking the problems with which the Council was confronted in the sphere of medical treatment, there existed an obvious and relatively pressing need that some early action should be taken to deal with those defects which seriously threatened the physical welfare of the children. The Board had been willing, therefore, to sanction certain experiments in the matter of medical treatment. It was necessary, however, that the Council should understand that the Board now felt it imperative to adopt a more critical attitude in regard to the Council's proposals, and, in particular, that the time was approaching when it would be unable to sanction the adoption of further schemes, even on an experimental basis, unless each particular scheme of treatment proposed had been (*a*) carefully thought out as regards all important details; (*b*) was so framed as to furnish full and definite information on the particular matters with which the experiment was concerned; and (*c*) had been devised so as not to hamper or embarrass the local authority in adopting any comprehensive system of treatment which might commend itself to them in the future. The Board could not too strongly impress on the Council that any satisfactory system of treatment of necessity must rest and be contingent upon adequate arrangements, in real working order, for regular medical inspection. As regards the proposals now in question, the Board had considerable doubt whether the three conditions just laid down were satisfied even approximately. For instance, it was doubtful whether the Council, in deciding to apply the dental treatment scheme to children of 8 and 9, had selected the most appropriate age-group for conservative dental treatment. The Board noted, of course, that one of the Council's reasons for selecting this group was that arrangements were contemplated for the general medical inspection of children at this period, and that it was expected that the school doctors would be able then to select children for dental treatment. For two reasons, however, the Board doubted the wisdom of basing dental treatment upon the general medical inspection of a third age-group. In the first place, it might prove impossible for the authority to inspect this group in addition to entrants and leavers. The latter was compulsory, but the optional inspection might have to be postponed or only partially carried out. In the second place, experience showed that the findings of school doctors engaged in general inspection could not be adopted in any considerable degree as the basis for arrangements for conservative dental treatment. Reliance on this source of information involved risk of embarrassment and early confusion in the working of the scheme and a probable failure to discover many cases which needed, and would probably repay, conservative treatment.

In view of these and other considerations, the Board had had considerable hesitation in deciding to sanction the two proposals now before it, and the Council must not expect that the Board would be prepared to sanction for general or permanent adoption a scheme of dental treatment framed on the lines of these proposals. As they were limited in scope, of local application only, and admittedly put forward as tentative and experimental, the Board had decided to sanction the proposals, since at this juncture it would be reluctant to interpose obstacles to any scheme which, however imperfect, offered a prospect of furnishing data for the Council's future guidance. The Board accordingly sanctioned the two proposals for twelve months, subject to facilities of inspection being afforded to the Board's medical officers and to a report by the Council upon the general working of the schemes.

THE ROYAL COMMISSION ON THE FEEBLE-MINDED.

The County Council on December 13th approved without discussion—although the need for debate was made an excuse for postponement last week—the whole of the recommendations attached to a survey of the Report of the Royal Commission on the Feeble-Minded in its bearing upon lunacy administration in London.[1]

[1] BRITISH MEDICAL JOURNAL, December 10th, p. 1881.

Fees for Examining Evening Classes.

We have received the following note from a medical correspondent:

The London County Council asks doctors to examine their teachers and evening classes in home nursing, first aid, etc., and offers £1 1s. and travelling expenses for any number of candidates under twenty. There is a written paper (six questions) and *viva voce*. Each paper takes at least ten minutes to read and mark, and the *viva voce* another ten minutes. Each candidate therefore occupies the examiner for twenty minutes, and the pay 1s.! I pointed this out to the officials, and although their medical adviser reported that he considered the scale of fees "very meagre," and suggested alteration, I have just been offered examinations at the old rate. Up to last November these examinations took place at each teaching centre, and consequently one often got five to nine candidates, and was paid £1 1s.; but from that date the pupils from several centres were gathered to one school, and now it is very rare to get less than fifteen, and more often the full twenty, for £1 1s. There is one last point which illustrates the red tape of the officials. Travelling expenses up to first-class railway fare are paid. My rail fare would have come to about 2s. 6d, I stated "journey by private motor, say 1s." The answer: "No other expenses but first-class rail actually incurred are allowed."

MANCHESTER AND DISTRICT.

Manchester Royal Infirmary and Medical Women.

Several months ago considerable dissatisfaction was expressed by the medical women who had graduated at the Manchester University that no resident posts at the Royal Infirmary were open to them, and strong representations were made that they had no opportunities of post-graduate clinical work at the infirmary. The board of management at the time adhered to its opinion that it was impracticable to appoint women to the resident posts; but after repeated discussions a special subcommittee was appointed to consider the question how the post-graduate education and training of medical women could be assisted. The committee has now issued its report, and states that it is possible to create one or more non-resident posts, to be called "qualified clinical assistantships," for medical women, and also that the posts of anaesthetist and assistant director of the clinical laboratory might well be open to medical women. The following are suggested as conditions to be attached to the new clinical assistantships:

1. Only fully qualified medical women who have been students throughout their whole couree at the infirmary shall be eligible, and the posts are to be tenable for six months, with an honorarium of £35 for the period.
2. Candidates are to be appointed for merit only, without any prescriptive right.
3. They shall attend at the infirmary daily from 9 a.m. to 6 p.m., except that attendance on Saturday after 1 p.m. and on Sunday shall be optional.
4. Their work shall be for two months in the women's medical wards, two months in the women's surgical wards, and two months in the special departments.
5. They shall work with and under the immediate direction of the resident medical or surgical officer and of the senior house-physician or house-surgeon of the unit, or the house-surgeon of the special department, performing the duties allotted to them by the honorary physician or surgeon in charge.
6. While in the special departments they shall assist, if required, in the out-patient department during the attendance of the honorary officer.
7. They shall assist, if required, at operations while engaged in the surgical wards or the special departments.
8. They shall live as near as possible to the infirmary, providing their own board and lodging.
9. When in the infirmary and not on duty they shall occupy the women students' room in the teaching block, and shall conform to the usual regulations and to any additional by-laws which may be laid down by the board of management.

It remains to be seen how far this will satisfy the demands of the women medical graduates of the university. The special committee evidently still adheres to the resolution that it is not practicable to appoint women to the resident posts, but the recommendations given above show that it is in full sympathy with the demand for fuller opportunities for post-graduate clinical training for women.

Midwife Heavily Fined.

Under the Midwives Act of 1902 a case was last week heard by the Manchester City stipendiary, the defendant being an elderly woman who was at one time a certified midwife, but whose certificate had been cancelled, following a suspension by the local supervising authority. Police evidence was given to the effect that between August and November of the present year she had attended several midwifery cases, for which she had been paid in some cases the sum of 7s. 6d., without a medical practitioner being present. The defendant pleaded that she had been engaged before the confinements, and had arranged only to attend with a doctor, and that the doctor had told her that she would be all right if she stayed till he came. In every case she said she had telephoned for the doctor. Evidence was given by four witnesses that the doctor only arrived the following day. It was stated that she had been fined for a similar offence last July, and on the present occasion the stipendiary imposed a fine of £5 and costs, amounting to £6 10s. in all.

WEST YORKSHIRE.

Infant Mortality in Huddersfield.

Special interest attaches to the birth notification experience of Huddersfield, since it is longer than that of any other locality, for the Corporation is still acting under the private bill which it obtained some five years ago; while before that it had obtained analogous experience, thanks to the scheme of voluntary notification introduced at his own expense by the mayor of the time, Mr. Benjamin Broadbent. Dr. Moore M.O.H., has attempted to summarize for the information of his authority the effect of this Act, which expires next year, as evidenced by the rise and fall in the infant mortality rate during its operation and for thirty years previously. In the thirty years ending December 31st, 1906, the average infant mortality was 154 per 1,000 registered births, the highest infant mortality in any one year being 183, and the lowest 119. On the other hand, during the forty-five months which had elapsed at the date of the report since the Act came into full operation, the average annual mortality rate was only 99—a reduction of over 35 per cent. on the original mean. Some part of this reduced mortality may no doubt rightly be ascribed to the more favourable climatic conditions which have prevailed in the past few years, but the balance is certainly the outcome of the much greater care of infants which notification of births usually induces. Dr. Moore gives the corresponding figures for thirty-three large towns in England and Wales, which show material reduction in infant mortality during the years 1907–8–9; there are great variations, and, with the exception of those of Huddersfield's near neighbour, Halifax, they are none of them quite as satisfactory. The lowest percentages of improvement were at Swansea, 5.2, and Nottingham, 12.6, while next highest to Huddersfield and Halifax come Norwich with 31.0, and Preston with 31.3. The towns which had the highest infantile mortality, and therefore the greatest scope for reduction, do not, as might have been expected, show a larger percentage of decrease than localities in which the initial mortality was comparatively low. For example, at Brighton, where the mean infantile mortality figure during the thirty years terminating December 31st, 1906, was 146, the mean percentage of reduction in the three following years was 28.8; while Croydon, with an initial mean of 125, reduced this for the three years 1907–8–9 by 27.2. On the other hand, Nottingham, with the high mean of 175, only showed a percentage reduction of 12.6; and Swansea, again, with an initial mean of 155, only managed, as has been shown, to reduce this by 5.2 per cent. The tentative conclusions which the lower rates of reductions would seem to suggest are two: One is that improved climatic conditions probably do not account for the very improved results in some of the localities; another is that in towns where a higher percentage of reduction has not been obtained either notification has not been effectively carried out, or causes of infant mortality are at work other than those which notification is intended to counteract.

Scotland.

[FROM OUR SPECIAL CORRESPONDENTS.]

KING EDWARD'S SCOTTISH MEMORIAL.

REFERRING to the Scottish memorial to King Edward, the *Edinburgh Medical Journal* says:

We put forward the suggestion that Scotland should make its memorial to King Edward a seaside hospital on the lines of Berck-sur-Mer, where, on the sandy dunes of Normandy, the little wrecks of Paris are turned into strong, sturdy bairns. Fresh air, sea breezes, and plenty of good food cure the tuberculous little Parisians, and they will do the same for our little ones. A site should be chosen which is reasonably accessible to all Scotland; it should be on the East Coast, for that is generally admitted to be the most suitable for such cases, and the district which fits these needs best is Fife. It is the cities which will provide the cases, and Fife is readily accessible from all our large cities. On its wind-swept coast there are many suitable sites where a sanatorium could be erected, where the sandy dunes would provide the playground, and the children would get the chance which at present is restricted to the well-to-do.

This suggestion of our contemporary is well worth consideration.

COMPULSORY VACCINATION.

At the last meeting of the Town Council of Edinburgh the Public Health Committee recommended that the Council memorialize the Government on the subject of compulsory vaccination, pointing out that, as local authority under the Public Health Act, it viewed with great concern the grave danger to the community of the increasing number of children growing up who have not been vaccinated, and that steps should be taken at as early a date as possible with the view of legislation to compel compulsory vaccination. On Tuesday, December 6th, the committee received a deputation from the Edinburgh and Leith Medical Practitioners' Association, consisting of the President, Dr. T. R. Ronaldson, Dr. James Ritchie, and Dr. James Smith. This deputation pointed out that their society represented the great majority of the medical profession of Edinburgh and Leith, and that they desired to support the local authority in securing stringent measures for enforcing vaccination, if not revaccination, and in greatly restricting the exceptions in favour of "conscientious objectors." Dr. James Ritchie gave figures of German returns on the point. A subcommittee has been instructed to prepare the statistics asked for by the Town Council.

SMALL-POX HOSPITAL ACCOMMODATION IN EDINBURGH.

At a recent meeting of the Edinburgh Town Council the convener of the Public Health Committee made a statement on the proposal from the Local Government Board as to combining with neighbouring local authorities for providing additional hospital accommodation for the treatment of small-pox. The committee was satisfied as to the accommodation available for the city. What the Local Government Board suggested might entail an outlay of anything from £100,000 upwards. The cause of the Board's action was to be found mainly in a rule passed by the Local Government Board for England, establishing a quarter of a mile radius, because of aërial diffusion of infection. The convener indicated the difficulty of applying this rule to Leith, and suggested that that was the reason for the proposed co-operation of Edinburgh with other local authorities. He also read a letter from Dr. John M. Bowie, the Honorary Secretary of the Edinburgh and Leith Medical Practitioners' Association, in which the opinion was strongly expressed that if compulsory vaccination and revaccination were enforced, there would be no necessity for a joint hospital for small-pox, and that in any case Edinburgh was already sufficiently provided for. Mr. Stevenson said his experience, gathered from people who came to him as a justice of the peace to claim exemption, had opened his eyes as to the number of persons who had no idea as to what vaccination meant. Mr. Rusk asked that statistics should be furnished bearing on the question. With a view to the provision of these statistics the convener, on behalf of his committeee, agreed to the recommendation being delayed.

At the annual dinner of the Edinburgh South Side Merchants' Association on Thursday, December 8th, Bailie Laing, referring to the proposed new small-pox hospital for the city, maintained that there was no necessity for the Local Government Board taking up the attitude they had done. The Board had said that owing to the "conscience" clause being taken so large an advantage of they were bound to have an epidemic before long. The Council's answer was that the Government should at once withdraw the "conscience" clause. If the proposed small-pox hospital were erected it would be nothing but a large white elephant.

GLASGOW.

Honour to Sir Hector C. Cameron, M.D.

On the occasion of his retirement from the Chair of Clinical Surgery in Glasgow University, and from the Western Infirmary staff, Sir Hector C. Cameron was entertained to dinner in the Central Station Hotel on December 5th by his former assistants and house surgeons. The chair was occupied by Mr. A. E. Maylard, Surgeon to the Victoria Infirmary, while the croupiers were Dr. Marshall, Rothesay, Dr. Jas. H. Nicoll, and Dr. R. H. Parry. The company numbered about fifty. In proposing the toast of "Our Guest," the Chairman referred to the admiration in which Sir Hector had always been held by those associated with him. As a teacher and a leader in surgery they honoured him; as a man they loved and respected him; and they might justly say that everything he had said was worth listening to, and everything he had written was worth reading. Sir Hector was endowed with a wonderful memory, and they hoped he would long be spared to give to the profession, as he was still so capable of giving to the public, "valuable material from his carefully garnered store." Dr. Joshua Ferguson, Paisley, on behalf of the company, presented Sir Hector with a loving cup, bearing the inscription, "H. C. C., Magistro Carissimo, Discipuli, MCMX." This graceful gift Sir Hector gratefully accepted, and the proceedings terminated with the singing of "Auld Lang Syne."

Medical Mission.

Sir Donald MacAlister presided at the annual meeting of the Glasgow Medical Mission on December 6th. The report of the Mission for the year showed that 47,000 patients had been attended to at the Dispensary, 1,369 visits had been made by the superintendents, the assistants had visited 300 cases; the Bible-woman had made 2,770 visits, and the nurse 2,002 visits. Principal MacAlister said that in view of the fact that one-twelfth of the population of Glasgow had been attended at the Dispensary, one could not but feel that the Mission was one of the most important organizations for the amelioration of physical as well as spiritual distress.

Examination of Nurses.

On November 22nd, 23rd, 24th, and 25th the Local Government Board held an examination, for the certification of trained nurses, at Glasgow University and Glasgow Western Infirmary, when fifty-seven candidates presented themselves. The subjects of examination were (*a*) elementary anatomy and physiology, (*b*) hygiene and dietetics, (*c*) medical and surgical nursing, and (*d*) midwifery.

A DOCTOR THRICE PROVOST.

At a recent meeting of the Town Council of the Royal burgh of Dornoch Dr. James MacLachlan was unanimously re-elected Provost for the third time. He has already held the office of Chief Magistrate of Dornoch for six years, and we congratulate him on the rare honour paid him in his re-election for a further term of three years. We also congratulate the burgh on having a man deemed so worthy of municipal honours. We understand that at the recent election practically every ratepayer within the burgh voted for Dr. MacLachlan. We mentioned a short time ago that Professor McKendrick, F.R.S., Emeritus Professor in the University of Glasgow, had been elected Provost of Stonehaven.

Ireland.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

PATHOLOGICAL MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.

THE Pathological Museum of the Royal College of Surgeons in Ireland has lately been enriched by the presentation to it by Dr. Macnaughton Jones of a valuable series of specimens collected by himself. The specimens, which are well mounted and preserved, are for the most part examples of pathological conditions of the female pelvic organs, and were carefully selected by Dr. Macnaughton Jones from time to time from the very large amount of material which he met with during the course of operation work. In consequence they represent a very complete series of the abnormal conditions of the uterus and adnexa. A special feature about the collection, which adds considerably to its value, is the fact that careful clinical notes of the condition of the patient before and after operation have been kept in connexion with each of the specimens.

DUBLIN HOSPITALS TUBERCULOSIS COMMITTEE.

The quarterly meeting of the Dublin Hospitals Tuberculosis Committee was held on December 8th. Sir John Moore was in the chair, and there were also present Her Excellency the Countess of Aberdeen, Dr. Cox, Dr. Herbert Byrne, Dr. Delahoyde, Dr. Frank Dunne, Dr. Kirkpatrick, Dr. O'Carroll, Dr. G. Peacocke, and the Honorary Secretary, Sir William J. Thompson. The committee adopted the report of a subcommittee appointed to draw up a resolution with regard to the notification of tuberculosis. This report, which points out "that the detection and isolation of cases of pulmonary tuberculosis in all stages are necessary in the interests of the public health," was directed to be sent to the Local Government Board and also to the Presidents of the Royal College of Physicians and the Royal College of Surgeons. Dr. J. T. Daniel reported that during the quarter he had made 20 visits to patients at their own homes, and that 25 had visited him at his residence. He had examined 8 patients for homes, and had obtained admission of 3 to the Hospice for Dying, and of 2 to the South Dublin Union Infirmary for special treatment. The rooms occupied by the patients removed to institutions were disinfected by the Corporation before new tenants took possession. The committee also received a report of the work done by three tuberculosis district nurses in Dublin during the nine months ending November 19th; 353 cases (139 old and 214 new) had been attended, involving 4,719 visits. Many patients had been assisted by gifts of clothes or rent, and 117 children of parents suffering from tuberculosis had been sent to the country through the fresh-air fund. The work done by the nurses was much appreciated, and was strikingly illustrated by the large proportion of patients who voluntarily asked for their services. Her Excellency reported to the meeting that the P. F. Collier Tuberculosis Dispensary in Charles Street was fast approaching completion, and that early next year it would be ready and all arrangements made to commence work.

SANATORIUM FOR COUNTY CLARE.

At the half-yearly meeting of the Clare County Council a deputation was received from the Ennis Branch of the Women's National Health Association in connexion with Lady Inchiquin's offer to erect at her own expense a complete cottage sanatorium with accommodation for six consumptive patients. The National Health Association has agreed to provide the necessary funds for the equipment of the sanatorium, and local medical men have offered their services on condition that the County Council will guarantee the funds necessary for the annual maintenance of the home. A small weekly charge will be asked from each patient, and it is hoped that the sum thus obtained will largely recoup the county funds. Lady Inchiquin's offer was unanimously accepted by the Council.

DAIRY FARMS.

The action taken by the North Dublin Rural District Council against the manager of the Model Farm, Glasnevin, particulars of which were published in our issue for December 3rd, p. 1811, came up for further hearing about three weeks ago, but, owing to the fact that the magistrates were equally divided in opinion, was again adjourned until Friday, December 9th, when the solicitor for the Rural District Council stated that his clients wished to withdraw the case. As no objection to this was raised on behalf of the Department of Agriculture, the attending magistrates assented.

Special Correspondence.

PARIS.

Fresh Difficulties in Medical Practice.—International Cancer Conference.

MY readers have not yet heard the last of "606." Unfortunately I must return to this subject, for these figures are causing great trouble to medical men. There can hardly be one *in nostro docto corpore* who has not been the recipient of a letter like the following, which I received quite recently:

Dear Doctor,—When could you find the time to call and give me an injection of 606 in the left thigh? People were right in telling me that doctors do not read the papers. Here is a new remedy just discovered, one that is capable of destroying, in the course of one application, all the spirochaetes that I can feel moving in my veins, and yet you do not use it! Do you intend to go on much longer playing with your benzoate of mercury, which is hopelessly out of date? Do you think it is pleasant for me to be pityingly asked the name of my doctor, as I was yesterday, when one of my brothers in pathology, who is in my confidence, informed me that he himself was injected with 606 a fortnight ago? You make me look like a fool, doctor, for your treatment is quite out of date. I shall expect you to-morrow morning, for I want to be cured in three days' time. P.S.—Try not to hurt me too much.

The following day I visited my patient and took with me my syringe, the physician's faithful companion since the beginning of time. (Molière, could he see our modern implements, would be astonished at nothing but their reduced dimensions!) I was about to fill my syringe, when the sick man seized my arm: "One moment, doctor," he said, "have you read *L'Omniloque* this morning? Really, you are a trifle hasty with your doses of '606.' What about Professor Bouchard's article? Don't you think it is impossible to be too careful with these novelties? At any rate, are you quite certain of this preparation of yours? Health has nothing to do with the fashion, and up to now your old treatment did very well. After all, doctor, there is no hurry. The German chemists have not said their last word on the subject, and since they have succeeded in discovering more than 600 products of the same kind, of which the efficacy increases at the same rate that the toxic properties decrease, let us have full confidence in them. Put up your syringe, and, to quote the words of their wise and eminent leader, let us wait for No. 607." I did as my patient wished, and a few days later I met him in the street, so absorbed in the perusal of a newspaper called *La Feuille*, that he ran against me. Without waiting to apologize for his clumsiness, he began at once: "The proof has been made, here is the report of the Congress of Koenigsberg. Two thousand savants from every quarter of the globe have collaborated in the apotheosis of '606.' Out of the 11,000 cases treated by them, there were only 12 deaths, and these were due to other causes, and had nothing to do with the treatment. (After all, there are always eccentrics who lack *savoir-vivre*, are there not?) Moreover, '606' is not only useful in cases of syphilis, but for sleeping sickness, recurrent fevers, and malaria. Ehrlich forbids its use, however, in nervous and cerebral affections. Hear what Alt has to say: Paralytics and consumptives are cured with lightning-like rapidity. After all this, doctor, I have no more objections to undergo this treatment. I will delay no longer, but will go to

your next consultation." He did not keep his word, however, and a short time ago I met him again, and asked him why he had not been to see me. By way of answer he swore at the newspapers, declaring that it was entirely owing to the contradictory statements they published on medical questions, and showed me a copy of the *Omniloque*, in which was printed in letters an inch long:

> We are certainly the most simple nation under the sun. Dr. Ehrlich's famous discovery is nothing more than an ancient French treatment, abandoned because it proved to be dangerous.

I tried to console him by remarking that we could not be so simple after all if, with Professor Mouneyrat, we had given up the treatment on account of its danger. "That is not the point," he replied; "the question is, how am I to be cured? The reading of all these articles, issued by a thoughtless press, is exactly like submitting to consultations for which I have not asked, and has the same result—I feel more bewildered than ever. Doctor, I put myself in your hands; do what you like. I shall read no more newspaper articles." I told him to take comfort; that his spirochaetes belonged to me, as it were, and that I would do all I could for them; and he agreed that that was certainly the simplest way out of the difficulty.

The International Cancer Conference was recently held at the School of Medicine in Paris, thanks to the French Association for the Study of Cancer. The result of each sitting may be expressed in one word—Statistics. Let no reader, however, imagine that I speak ironically. I firmly believe that it is a good plan to begin the study of a disease like cancer with a kind of catalogue, and to follow Homer in enumerating the enemy's forces. Unhappily, statistics are not so easily established as is popularly supposed, and the members of the conference were quite right to open the proceedings by endeavouring to get a correct estimate of cancer statistics. Though Professor Delbet preached the curability of cancer by means of a surgical operation in the early stages of the disease, it was evident at the second meeting of the congress that the majority of his colleagues put more faith in vaccination and serum-therapy. It appears, therefore, that the surgical cure is by no means so certain as these latter methods of treatment. The reason of this is that cancer is, perhaps, the disease in which the two elements of infection and predisposition play the most equal parts, and the truth of this is proved by the fact that the disease seldom appears in a patient before the age of 35 or 40. In all probability the close study of the exceptional cases—that is to say, of precocious cancer—combined with a full knowledge of the patient's history, would do much towards the discovery of the predisposing causes of the disease—causes which, in such cases, must be peculiarly active and virulent. Cancer belongs to the surgeon in virtue of its infectious element, but when it is a question of predisposition it enters the domain of the physician. It is, in my opinion, the latter who has the last word on this subject, for I venture to disagree with the eminent Secretary-General of the Conference, and hold that, in spite of the tremendous progress of surgery, in general practice it is almost as useless to operate on an internal cancer as to brush the dust off a peasant who is winnowing his grain. Patient, rational study may give us the key to the problem, and the greatest confidence should be felt on the part of the public with regard to the work done by such a meeting as the International Conference.

BUDAPEST.

The Care of Mentally Deficient School Children.—The Weaning of Young Children.

INVESTIGATIONS which, though principally confined to the city of Budapest, have been extended throughout Hungary, have proved conclusively that the Hungarian public schools year after year receive as pupils thousands of children who are mentally, morally, and physically unfit to cope with the conditions under which they will be obliged to live during school hours. These investigations are being conducted by Dr. Menyhèrs Edelmann, Director of the Children's Home at Nagyvàrad. "Fully 10 per cent. of the pupils of our public schools require special supervision," said Dr. Edelmann at a recent meeting of the Pediatric Society. "I am convinced that from 500 to 1,000 of the 25,000 children who attend the schools of Budapest (with the exception of private and denominational schools) are so deficient in mind or body as to render it an absolute necessity for them to receive special instruction in small classes if they are to be made fit to take any part in the battle of life, and they ought to have the most careful attention. Up to the present there has been no compulsory medical inspection of school children in Hungary, and therefore no child is examined unless his appearance is such as enables his teachers to realize that he is unlike other children. The time will come, however, when every child will be examined by a doctor at the commencement of his school career, so that it may be known at the outset if he has any bodily or mental ailments which threaten to prevent his following the proper school course, and steps will be taken to ensure proper treatment. For instance, if a boy has weak eyes, it will be the duty of those in authority to see that his parents provide him with spectacles, and that a front seat in school is delegated to him; whilst in cases of partial deafness every care will be taken for the child to be placed where he can hear properly. Again, a great many school children show symptoms of developing curvature of the spine, and in such cases the teacher should be informed of the fact, and impressed with the necessity of insisting upon a correct position when sitting over lessons. It is quite possible that, in the majority of cases, such precautions would result in overcoming any tendency towards spine disease." Dr. Edelmann then referred to the oft-repeated statement that ten thousand children go every day hungry to school, and declared that this report was very much exaggerated. "All the same," he said, "it is the teacher's duty, when any of his pupils appear to be starving, to do all in his power to remedy such a state of affairs. With regard to such children it is obviously unwise to put them in the regular classes, for not only do they interfere with the progress of their classfellows, but they cannot possibly receive the special attention they require. Such mentally deficient children as attend the public schools are, of course, on quite a different level from the children in State institutions and asylums, and yet they are quite incapable of following the usual curriculum of our public schools. Nevertheless, with proper care and treatment, they can be made into useful and self-supporting members of society. The first care of those in charge of them should be to teach them to work with their hands, so that they will be able to earn their own living, and they should be taught to read and write and sufficient arithmetic to enable them to manage their own money. It is obviously impossible to expect the teachers of the regular classes, each of which consists of some fifty pupils, to do any work of this kind. These backward children should be placed in separate classes, comprising not more than fifteen pupils in each, under special teachers, who will thus be able to study each child, and give individual instruction and attention. At present there are facilities for teaching 150 of such children in Budapest, although the city contains from 1,000 to 1,500, who all require special care and a special training."

In a book on the care of young children Professor Behrens says the usual time for weaning a baby is at the end of the first year; but if the child is thriving and has already proved itself capable of digesting cow's milk, it may be done a couple of months earlier, provided that it is not during the heat of summer. The weaning should never take place immediately before or after the warm weather; roughly speaking, therefore, it should not be attempted from the month of May to the end of September. Prolonged lactation is dangerous, causing both ill-development of the child's bones,

and delay in his dentition. The weaning should be very gradual; and during the first year the child should be fed solely on milk, since soups, vegetables, wine, etc., are apt to cause rickets. As regards the mother, during the critical period of weaning her child every care should be taken to avoid fatigue, whilst the breasts should be swathed in a cotton binder, and gently rubbed with warm, sweet almond oil both morning and evening. There is no necessity for the use of purgatives; but the patient should be careful to diminish the quantity of fluids in her diet. During the second year, in fact, until the appearance of the twentieth tooth, the child's dietary should consist of milk, eggs, and bread, the latter including not only the various forms of bread, but also cereals. Towards the end of the second year a purée of potato may occasionally be given in small quantities. The proprietary cereal preparations should be avoided, and all food should be liquid or semiliquid—entirely liquid at first. The main food for a child is milk, and a child of twelve months old should take about a quart a day, a quantity which ought not to be exceeded during the second year. The greatest care should be exercised to avoid overfeeding, which is more frequently the cause of insufficient nourishment than underfeeding. At first a simple gruel should be given once daily, with only sugar and salt added; later on it should be given twice a day, with the addition of a little butter. When, in the course of time, eggs take their place in the nourishment of the child, the yolk alone should be given mixed with the gruel or milk; later the whole egg can be used. But it should be remembered that eggs are often the cause of constipation. Until the child has cut his twentieth tooth his diet should be very closely watched during the summer months.

Correspondence.

NATIONAL MEDICAL SERVICE.

SIR,—The rapidity with which Dr. Cooper and I approach each other induces me to ask for your indulgence once more before the end of the year. My logic and mathematics I leave ranged alongside his comments, and welcome the emerging distinctness of the practicability, the adequacy, and the advisability of proposed modes of medical organization as separate phases of the discussion. Dr. Cooper seems almost to admit that, whether advisable or not, a *per capita* rate of 10s. would be adequate over a parcel of 2,000, and then proceeds to argue that payment in the same proportion would be inadequate over a smaller parcel because there are only small parcels. Even if we assume with him that the 15,000,000 were divided among the 40,000 doctors, physicians, surgeons, and alienists included, so that each received £187 10s., we may surely also assume that the 30,000,000 omitted, as not in need of the State grant, will pay no less, and we should have an average income of £562 10s. for the 40,000. His trouble here arises from mixing the rate of payment with the difficulty of getting enough of it—a problem quite different, and needing other measures.

Dr. Cooper is very fond of exceptional cases; and Dr. Fothergill's figure of 10s., which I took because I thought it practicable, he now gets into difficulties by taking it into a corner with a man who has a wife and twelve children. If all of the twelve children are of school age we shall have to recommend their hero father to some of the organizations who fear that we have a declining birth-rate. For each child under 16 Mr. Lloyd George has already made to the smaller income-tax payers a grant of 7s. 6d. a head, and if he do no less for the working class 10s. does not seem very far away. Each child over 16 would be at work, and would, of course, make his individual contribution.

With Dr. Gough it is extremely difficult to maintain a discussion, since he seems to regard me as an incarnate sneer, finding characteristic expression even in my accurate statement of the way in which Dr. Fothergill asked the British Medical Association, a body with definite membership, an organized mode of formulating opinion and representatives responsible to their constituents, to come into line with a group whose members are responsible only to themselves, whose limits are unknown, and whose object is defined by Dr. Fothergill as State control.

To the request for a further pledge I must give an unqualified negative, because it is based on the incorrect statement that the general practitioners alone are affected by the scheme of insurance, and because the general practitioner has now the control of the British Medical Association and its whole organization. If the consultants do not realize that the solution of the problem of sickness insurance may alter the whole relations of the profession throughout Britain there may be a rude awakening for their successors, and if the general practitioners should wish to solve the problem without regard to the whole profession they will have to divest themselves of both the intelligence and the sense of fair play which they have hitherto so conspicuously exhibited in declaring the policy of the British Medical Association.

On the discussion of the advisability of the two modes of organization, raised by Dr. Cooper and Dr. Dick, I do not propose to enter at present, and perhaps the report of the Poor Law Committee may render needless any further demand on your space.—I am, etc.,

Dundee, Dec. 11th. R. C. BUIST.

STATE SICKNESS AND INVALIDITY INSURANCE.

SIR,—I have read, and I hope every member of the British Medical Association will read and ponder, the careful and exhaustive paper by our Medical Secretary published in the SUPPLEMENT, BRITISH MEDICAL JOURNAL, December 10th, 1910, on the present "crisis" in the medical profession. With the definition of "crisis" I fully agree; to paraphrase Shakespeare—There is a tide in the affairs of groups, as of individual men, which taken at the flood leads on to victory. Those who cannot see that such a tide is now before us in the affairs of the medical profession must indeed be blind or indifferent. And it behoves each one of us to very seriously consider the situation, not from a mere personal or pecuniary standpoint, but from a broad statesmanlike one, bearing in mind the golden rule of the greatest good of the greatest number; at the same time considering the immediate and practical application of any suggested scheme or schemes.

On the whole Dr. Smith Whitaker in this address presents the problems before us in a very full, fair, and impartial manner, not seeking to prejudice any particular view or proposal. With his main contention for united action there can be no cavil; but unfortunately there is a very big "if" prefixing it. *If* the profession can only be united and firm, especially when it is only demanding fair and just treatment by the Government or the country, it is practically bound to get what it asks. Dr. Smith Whitaker's great experience as an organizer, however, teaches him that such unanimity is extremely unlikely. When he states that, in addition to those who strongly support the principle of payment per attendance, "others are equally strongly of opinion that, on the whole, the profession would come off best, would get the most remuneration, and be in the most satisfactory condition if they obtained the basis of capitation payment," I confess I see little likelihood of reconciliation between these "equally strong" but diverse views. I do not doubt for one moment that Dr. Smith Whitaker has very good evidence for the statement just quoted; but I venture to hope that those who hold this opinion are in a considerable minority, and that they do so not so much because they are enamoured of the system, but because they would rather "suffer the ills they have than fly to others they know not of." In other words, they do not like giving up a certain £100 or £200 a year for a possibly higher but uncertain and variable annual income. All I can say is that I have yet to meet the medical man who is firmly wedded to contract practice for its own sake, and in the course of the long correspondence in your columns on the subject the advocates of contract practice have been strangely silent. On the other hand, the Association has repeatedly and "in multitude assembled" condemned the principle of contract practice, whilst the experience of State sickness and invalidity insurance in Germany, where this system is in vogue, should open our eyes to its evil and oppression.

The argument which seems to emerge from some of the criticisms offered is that since we cannot expect unanimity,

and as some medical men (never mind how many) are content with the servitude of contract practice, and this will undoubtedly be the simplest method for the Government, and therefore the one they will in all probability adopt, we who are opposed to contract practice in principle, and believe it is a pernicious system—bad alike for patient and doctor—should withdraw our opposition, even although we believe ourselves to be in a large majority, and bow to the inevitable.

If this is the way medical politics is to be conducted it does not speak very well for the influence of our powerful Association, and it is rather different from general politics (not that I would have us copy all the methods of politicians), but surely if our representatives and councillors are really representative they should ascertain and interpret the true wishes and opinions of the *majority*. I do not mean that we should ride roughshod over any minority—let us as far as possible avoid injuring them—*but the will of the majority must prevail.* If the question is put to a vote, and a majority is given against the principle of payment according to work done, we must accept the verdict, for the time being at any rate. But there is no reason why, by straightforward and constitutional means, by argument and reasoning, we should not continue to strive for what we consider to be a better state of things.

It seems to be thought by some that we should remain silent whilst our representatives and councillors are considering the matter for us; with all respect and deference I must maintain that this *is a matter we must decide for ourselves*—our representatives and councillors should then loyally carry out *our* wishes.—I am, etc.,

Bowdon, Dec. 10th. P. R. COOPER.

SIR,—Dr. Buist, in the JOURNAL of December 3rd, while failing to reply to the challenges made to him in my communication of the previous week, would seem to convey the impression that I advocate a capitation grant of 10s. a head. This is absolutely incorrect.

The complaint of those now opposed to Dr. Buist is, and I am certain of the majority of the profession later on will be, that no sound evidence has been produced by him in favour of the proposal of a capitation grant being accepted by the doctor. He dangles before us as baits £750 and £1,000 in payment for attendance on "parcels" of beneficiaries. Why he stops at these amounts it is difficult to comprehend. Baits, however, are not evidence.

The challenges made to Dr. Buist and those who are associated with him are these:

1. *To produce an actuarial opinion stating that his proposal of a capitation grant to a doctor is insurance and not an honorarium.*
2. *To define the services for which this honorarium is to be the reward.*
3. *To advance some scheme by which to prevent the amount of benefits which can be obtained in return for this honorarium exceeding a maximum limit.*

Challenge 1.—To assist the answer to this may I quote the actuary of the Century Insurance Company (Edinburgh)? His statement, based on twenty-five years' returns of a scheme for *professional and business men*, is (1) that, while mortality is improving, invalidity is increasing; (2) that the average of illness for all the beneficiaries insured is three weeks a year each. Dr. Buist, in accepting the 10s. capitation payment, therefore advocates this sum as a satisfactory remuneration for *a known three-weeks' attendance on a beneficiary.* He goes further: he advocates it as acceptable for attendance on those the State will insure—namely, the aged, chronics, casual labourers, and] those engaged in hazardous employments. The attendance on his parcel of 1,500 beneficiaries would be at least fifty visits a day; all surgery attendances being in addition. He suggests that £750 makes this a tempting offer to a doctor, and a scheme to be recommended to the Government. We say such a fee is an honorarium; Dr. Buist calls it a scientific process, and repudiates it being a gamble.

Challenge 2.—Then the services to be rendered for this honorarium. Does Dr. Buist exclude confinements, fractures, dislocations, consultations, anaesthetics, night calls, special visits, certificates, attendance on those ill through "personal misconduct," operations? If he *does exclude* them, how does he propose we shall get payment for them, and how does he propose to convince the Government that his scheme is inclusive? If he *does not exclude* them, does he propose that the doctor who receives the 10s. shall pay the surgeon, the physician, and the anaesthetist called in on the demand of the beneficiary? Such insurance may be "a scientific process," but the general practitioner will be apt to decide that, so far as he is concerned, the process will only lead him to an early grave or the bankruptcy court, and his family to the union.

Challenge 3.—Then the prevention of the amount of benefits that can be demanded exceeding a maximum limit. Can Dr. Buist quote a single instance of an insurance policy being issued which leaves the decision as to whether the beneficiary is entitled to demand his insured benefit solely to the determination of the beneficiary? Possibly a beneficiary could not demand more than one operation for removal of the uterus or prostate, but this would not limit the exactions of a neurasthenic. Here again Dr. Buist would have us believe it to be a scientific process; others term it a gamble.

If the report to the Divisions of the Poor Law Reform Committee does not contain replies to these challenges, the medical profession will not be slow to appreciate the reason why. But will Dr. Buist anticipate this report and so help us?

In the meanwhile, those of us who are interested in the improvement of the health of the community, morally and physically, as also in our own economic existence, will do well to fight shy of all baits of £1,000 for "parcels" of beneficiaries, the acceptance of which can only mean that the collar of servitude at present around the necks of the few will be clasped as well around the necks of many others of our profession whose financial circumstances, fortunately for them, have placed them for the present beyond the necessity for accepting any such terms.—I am, etc.,

Southfields, Dec. 11th. E. ROWLAND FOTHERGILL.

SIR,—I had not intended to enter into this discussion until the report of the Poor Law Reform Committee had been issued, as I was anxious to hear all the arguments and arrive as nearly as possible at the logical issue, but after reading Dr. Cooper's letter[1] I feel bound to correct not his arithmetic, but the false premisses from which he makes his deductions. I will assume for the time that he reads Dr. Buist rightly—he states that the 15,000,000 persons to be provided for under Mr. Lloyd George's scheme must be divided among 40,000 medical men, giving, at a fee of 10s. per head, £187 10s. for each practitioner.

Now, according to this year's *Medical Directory*, the number of medical men in the United Kingdom is 32,000 (approximately), and of these we must count only those in ordinary general practice, deducting all those who would not act as medical officers under the scheme. Such are resident medical officers at hospitals, asylums, sanatoriums, prisons, etc., school medical officers, whole-time medical officers of health, consultants, specialists, men in what are called "better class" practices, and retired medical men. I can only guess their number, but do not think that 20 per cent. would be too large a proportion. This would leave about 25,000 to share the fifteen million half-sovereigns, giving an average of £300.

If we take all the medical men, we must take the whole population, assume that they are all to be provided for under the scheme, and all at the same rate. We shall have 45,000,000 divided among 32,000 practitioners, less those retired, whole-time medical officers of health, and pure consultants—say 30,000—giving exactly 1,500 for each officer, an average income of £750—not so very bad.

But I think that Dr. Cooper misreads Dr. Buist, who does not say that 1,500 or 2,000 would be the average number of persons that would be on the list of every medical man, but that any medical man with an average of 1,500 or 2,000 on his list would draw £750 to £1,000 a year; and in manufacturing towns or colliery districts there must be many men in charge of an average population of quite these numbers. I know men making £400 or £500 a year from clubs alone, and that at a rate of 4s. a head or less, representing a membership of 2,000 to 2,500, which at 10s a head would give them satisfactory

[1] BRITISH MEDICAL JOURNAL, December 10th, 1910, p. 1887.

incomes of £1,000 to £1,250. I should think that in many country and country town practices £100 was not an unusual sum to be derived from clubs; at 4s. a head that would mean a membership of 500, worth at 10s. a head £250.

Then Dr. Cooper says that we shall certainly not get as much as 10s. a head all round. Why not, if we ask for it? Just as likely as so much for each attendance. It has been calculated that the average number of attendances that a club patient receives in a year is about five; that at a fee of 10s. would mean a payment of 2s. for each attendance. If we are to be paid "per attendance," are we not likely to get as much as that for each visit? I hope so.

Lastly, Dr. Cooper argues that the working man will not be likely to pay such a fee, and suggests the case of a man with wife and twelve children who would have to pay £7 a year. One would really think that Dr. Cooper knew nothing of the suggested Government scheme. Does he not know that it is proposed to divide the annual contribution between the workman, the employer, and the State? so that the man with the exceptionally large family would pay, not £7, but one-third of that sum, that is, £2 6s. 8d.; but even this deduction is not correct, for we may fairly assume that of the twelve children, five would be over 16 years of age, and so paying for themselves, leaving the father only nine persons to pay for, requiring, according to Dr. Cooper, £4 10s., but really only £1 10s.—I am, etc.,

Bradford-on-Avon, Dec. 13th. CHAS. E. S. FLEMMING.

REPORT OF THE EDUCATION COMMITTEE OF THE GENERAL MEDICAL COUNCIL.

SIR,—With the greatest respect for my old friend and colleague on the Council, Principal Mackay, I cannot conceive a stronger instance of the *non sequitur* in logic than the assertion in the report of the Education Committee that raising the standard of preliminary examination to the higher level of the senior plane would have the effect of lowering the standard of the corresponding examination. Surely the result would be exactly the opposite, as has been abundantly proved by the experience of the improvement of the standard of teaching and passes in purely professional studies, by insisting on higher tests. Strict and thorough examination are indeed the surest and most direct means for bringing about such improvements.

Again, the report of the same committee speaks of the time not being "ripe" for relegating the study of physics, chemistry, and biology to a period prior to beginning medical study proper, on the ground that the secondary schools are not prepared to teach these subjects effectively. I am astonished to find a Scotsman ignorant of the great advance in this respect in Scottish central schools. Here, in this remote town in the Highlands, our "Academy" is carrying on a three years' course in science embracing these subjects—surely an immensely better system than a single year's cram, as is the rule at present in most medical schools. But is not this another instance of "putting the cart before the horse"? Make the position open to secondary schools, institute a searching examination, and the result will surely follow; these teaching *home* centres will surely and certainly arrange their courses of study to meet the demands of the medical licensing bodies.

Further, the committee has taken much trouble to show that for the great majority of students five years is too short a time to get through the present curriculum (and a fuller one is wanted). What does it propose as a remedy? Neither of the two possible ways out of the dilemma—that is, dropping or placing outside certain subjects of study or lengthening the present course to six years.

Why, Sir, all this fruitless beating about the bush? There is only one possible explanation, and the reasons are not far to seek. *Quieta non movere.*—I am, etc.,

Dingwall, Dec. 6th. WILLIAM BRUCE, M.D., L.LD.

EPSOM COLLEGE.

SIR,—With regard to the letters about Epsom College appearing in your columns on December 3rd and 10th, may we say a few words?

The first objection raised is that of the dress of boys in the Lower School. Your correspondents object to the Eton suits both from a hygienic point of view and from point of view of expense, and speak as if it was a regulation of the school that the smaller boys should wear them. There is nothing said in the rules except that coats must be black and trousers dark, and it is entirely the choice of the parents if their sons return in Eton suits.

Secondly, the writer advocates a medical inspection at the beginning of each term, and the registering of height and weight. The latter is done every year by a member of the staff, while the former, if necessary, should be done at home by a medical man who has known the boy, and is much more competent to judge under such circumstances. It would be absolutely impossible for the school doctor to examine thoroughly every boy in the school during the time devoted to the school attendance.

Again, may we point out that Epsom College is not a kindergarten, and that if between ten and eleven hours' sleep is not sufficient for a boy he ought not to be sent to a public school? Dancing, also, is not a usual subject of instruction, except in a preparatory school, and should be learnt in the holidays, though we do not deny that every one should know how to dance.

With regard to the corrugated windows referred to, we might point out that they are not so much to prevent members of classes looking out as to prevent people outside looking in. There would appear to be some discrepancy in your correspondent's remarks, since in one place he refers to the highly satisfactory report of the Joint University Board and in another implies that the teaching does not hold the attention sufficiently to prevent "wandering eyes."

But on one point we do agree, that something more than bread-and-butter should be given at the evening meal, not only in the Lower School, but also in the College itself, though we do not see any objection to bringing certain delicacies from home.

Hoping you will find room to insert this in your columns, as we speak from experience.—We are, etc.,

Epsom College, Dec. 11th. MEMBERS OF THE SCHOOL.

ALCOHOLISM AND DEGENERATION.

SIR,—Professor Pearson has apparently misunderstood our point. His claims as a mathematician and statistician are not in dispute, and never have been. The issue that we, with many others, have raised is not one of mathematical expert knowledge but of scientific accuracy in an ordinary biological problem. Briefly stated, it is simply that statistically exact deductions cannot be drawn from statistically inexact and incomplete biological data.

There are many points which are essential to a research into the effects produced on children by their parents taking alcohol, but the first datum to be determined is whether the parents began taking the alcohol before the children were born.

This is our point, and we thought we had clearly expressed it in our former letters. Professor Pearson, however, states that he does not admit that Miss Elderton and he failed to obtain this essential datum, but he does not explain why their memoir is absolutely silent on this primary point. Indeed, the argument in the sentence from his second (controversial) paper, quoted in your editorial—namely, that "if some children were born before parental alcoholism had started, some were certainly born after"—is in itself an admission that he and Miss Elderton based their results on conjecture and without any ascertained data before them as to the habits of the parents previous to the birth of the children.

In the absence of such data, it seems to us it was not justifiable for Miss Elderton and Professor Pearson to speak in their memoir, and as he does in his letter, of the "non-alcoholic" and "alcoholic" sections into which they grouped the parents.

These authors have never had before them a group of "non-alcoholic" parents, and the *Times* and other papers have unfortunately been gravely misled by these terms "alcoholic" and "non-alcoholic" into believing that Professor Pearson and Miss Elderton had made unexpected discoveries as to the non-injurious effects on children of alcoholism in the parents.

Professor Pearson suggests that one of us (V. H) has not "faced the figures" in their *Memoir*. We both have

done this frequently, and it was because this operation revealed the fact that from their statistics fundamentally important figures were wanting that we thought you were in error in editorially charging Professor Marshall and Mr. Keynes with being "overhasty," when, as a matter of fact, these authorities had already pointed out the same fatal omissions in the *Memoir*.

Dr. Ryle has failed to realize our position respecting the admission of anonymous attacks in the columns of our JOURNAL, just as he originally failed to realize the fallacies in Professor Pearson's and Miss Elderton's *Memoir*. (See the *National Temperance Quarterly*, September, 1910.)

As regards Dr. MacNicholl's work, Professor Pearson informs us he is about to publish a critique on the work of that gentleman and others. When he does so we will take what he says into consideration and reply thereto.—We are, etc.,

MARY D. STURGE,
Dec. 11th, 1910. VICTOR HORSLEY.

CARCINOMA IS A PARASITIC DISEASE.

SIR,—Sir Alfred Pearce Gould, in his most interesting and suggestive lecture on cancer, at which I had the satisfaction of presiding at the Royal College of Surgeons on December 7th, criticized very courteously the views which were expressed in my Bradshaw Lecture five years ago.[1] He quoted my "text" correctly: "That the carcinoma cell is an independent organism," etc., but he did not correctly quote the arguments I used later in the lecture. For his next paragraph (addressed to me) was as follows: "You shrank from accepting Hauser's suggestion that the protozoal cells of cancer are derived or descended from the living cells of the host, and asserted rather that 'the parasite is introduced into the body from without.'"[2]

My actual words are thus quoted, and the only place in which I can find them in your report of my lecture is in the following sentence: "I suppose we must then assume that *the parasite is introduced into the body from without*, after the manner of parasites generally; or that it is formed, in some unknown manner, within the body of the host."[3]

After discussing the evidence in favour first of the external, then of the internal origin of the carcinoma cell, I said: "It must be admitted that these three features of carcinoma—the characters of the cell, the structure of the tumour, and the age-incidence—make it difficult to conceive the idea of a parasite introduced into the body from without. And they do strongly suggest that the parasite is actually formed or developed within the body of the host, and that it is in some manner derived from the elements of the host. Hauser has no doubt that his new race of cells is derived from the elements of the host, and appears to find no difficulty in the hypothesis. I confess to me it is an astounding proposition; for, set forth in plain terms, it is none other than the origin of new species of the lowest forms of animal—of protozoa. The mode of origin which is suggested is so different from that we have been accustomed to accept for the last five-and-twenty years, that I scarcely dare to set it down in words. That there will be much discussion and dispute over it I cannot doubt; for I am quite confident that time and research will confirm the view I have expressed to-day of the nature of the carcinoma cell."[4]

In order to be sure of the views I had expressed, I read my lecture through very carefully. There is no doubt that I heartily wished, at the time I delivered it, that the evidence would be in favour of the entrance of the carcinoma cell from without. But I was forced to acknowledge that the evidence was stronger in favour of the formation of the cell within the body. Following the argument to its logical conclusion, I was further forced to admit that, if this were so, it would be necessary to admit that the carcinoma cell is a new creation; and, still further, that it was probable this new creation was derived from the elements of the host. No wonder, in the face of this conclusion, I was astonished at the light manner in which Hauser treated the hypothesis. I am sure the real truth never dawned upon him. Nor do I think that Dr. C. Powell White,[5] who expressed the view "that the cells themselves of cancer act as parasites," really appreciated the significance of his suggestion; for he takes the view of Adami that the cells acquire the "habit of growth." "Once the cells have acquired this habit, they behave as independent parasites."[6]

I am very glad that Sir Pearce Gould has given me the opportunity of again stating my case. It has never been out of my mind for long together during the last five years. I have been watching all the new evidence which has been derived from observation and experiment, and have been collecting certain evidence on my own part, with the intention of again advancing and defending the argument of the Bradshaw Lecture of 1905. I shall hope to do this in the course of the coming year, either in a couple of lectures or in some other manner.

In the meantime, I would say that every discovery of the last five years is in favour of the "text" of my Bradshaw Lecture: "That the carcinoma cell is an independent organism, like many a protozoon; that it lives a life which is wholly independent and proper to itself; and that it lives as a parasite in the body of the animal which is affected with carcinoma, deriving its nourishment from this host, and doing nothing to repay the host for the sustenance of which it robs him."

The evidence which was at that time a little in favour of the internal as against the external origin of the carcinoma cell has been much strengthened.

And I am prepared to apply the theory to cancer of every kind instead of limiting it (as I did five years ago for convenience) to carcinoma.—I am, etc.,

London, W., Dec. 12th. HENRY T. BUTLIN.

THE BRADSHAW LECTURE ON CANCER.

SIR,—I am sure all your readers are very grateful to Sir Alfred Pearce Gould for his luminous exposition of the recent experimental work done in cancer. What an appalling and tragic drama Sir Alfred presents to our contemplation—1 in 8 women above the age of 35 doomed to die in intense suffering!

Without in any way wishing to disparage the work done by the Cancer Commissioners, it is evident that the only advance made in our knowledge of the subject is that cancer can be inoculated from animal to animal of the same species; further than this the veil has not been lifted, and the mystery is still unsolved.

I am tempted to ask if the problem has ever been properly tackled from the clinical standpoint. I suggest that medical men in all parts of the world should focus their attention on one particular part of the body—say, of the breast—with the view of elucidating such points as I roughly indicate: Age; heredity; climate; influence of child-bearing; food and drink; material worn next the skin (flannel, flannelette, linen, cotton, silk); how often is the skin washed and what kind of water is used; what particular kind of soap; is the soap properly washed off; what method of washing employed—for example, hand, sponge, or glove; influence of corsets. If such an investigation was carried out and the results scientifically analysed, some common denominator might be found.

Or take the case of the tongue. Has a case ever been recorded in which the teeth were good, there was no history of syphilis, and the patient a non-smoker? A medical friend of mine recently died from cancer of the tongue, and I know that for years he was in the habit of smoking fifty cigarettes a day.—I am, etc.,

December 11th. KENNETH CAMPBELL, F.R.C.S.

DR. HADWEN AND THE "CRIMSON CROSS REMEDIES."

SIR,—I had no intention of taking further notice of the erratic communications of Dr. Drury, who is wandering farther and farther from the point at issue. I hope this may be my last letter, for the correspondence is reaching somewhat absurd proportions.

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[1] BRITISH MEDICAL JOURNAL, 1905, ii, p. 1565.
[2] BRITISH MEDICAL JOURNAL, 1910, ii, p. 1836.
[3] Loc. cit. p. 1559.
[4] Loc. cit., p. 1570.
[5] When I first formed the opinion that the carcinoma cell is an independent organism, and acts as a parasite in the body of the host, I did not know it had ever been previously expressed. Shortly before delivering the Bradshaw Lecture I discovered Hauser's paper in *Ziegler's Beiträge*, 33, section i, 1903. And, two years ago, Dr. C. Powell White pointed out to me that he had made a similar suggestion in his Erasmus Wilson Lectures at the College of Surgeons in 1902. In his "Lectures on the Pathology of Cancer," Manchester, 1908, he concludes the last lecture with these words: "We can say, then, that cancer is not due to a specific parasite or parasites, but, on the other hand, we can say that the cancer cells themselves act as parasites. This latter view will explain all the phenomena of cancer."
[6] *Lancet*, 1902, i, 494.

If it gratify your correspondent to suppose that I am in "a sorry plight," that I have "completely surrendered and capitulated" and "waved the white flag," etc, I have not the least objection. All these fireworks will not alter the simple fact that I have fully answered his question as to the results of my investigations concerning the use of the "Crimson Cross Ointment" in the Gloucester epidemic of 1896, and that I am ready to show him my case-books and detailed statistics, and give him any further explanation which lies in my power when he likes to avail himself of the opportunity of looking at them.

He now draws my attention to five questions which he intimates I decline to answer, and he says he is "entitled to an answer without being put to the expense of a journey to Gloucester." Very well, if that will satisfy him, I will reply again, for, except in one unimportant particular, I have already answered these irrelevant trivialities.

He asks:

1. Why did my name disappear from the advertisement of the Crimson Cross remedies in the "Inquirer" in the very next issue after he (Dr. Drury) had referred to it in the "Jennerian"?

How do I know? I have already told him I never saw the "Jennerian" nor the advertisement. I only know what he tells me about it, and I have never troubled myself to look for it. He had better ask the advertiser.

2. Where was the composition of the Crimson Cross Ointment long ago published in the medical press?

I don't carry these things in my head, and I am too busy to take the trouble to look up such an insignificant detail. If it be any advantage to Dr. Drury to know, he can explore the medical files for 1896-7, about which time it was ridiculed a good deal.

3. Am I prepared to state the actual source of the information contained in my case-books

Where does he suppose it could come from except from the patients themselves or from their immediate friends?

4. By whom and for whom was this independent information collected?

As I have told him, it was collected by myself for the most part, for myself, and I hold myself responsible for it all.

5. Was oil in some form not used in any way during the epidemic except as an ingredient of Captain Feilden's remedy?

No, it was not, except by Dr. Brooke, as I have already stated in my letter of June 13th.

Having now once more answered all his questions I hope Dr. Drury will be satisfied.

Now as to his side-issues. As he interprets my refusal to "defend" myself, concerning a certain utterance he has quoted, into cowardice, let me at once say, I stand by every word I have said. Nowhere has the tyranny and despotism of the medical profession been witnessed more clearly than in the case of the Vaccination Acts, where medical law and the policeman's truncheon have kept close company. In all ages the medical priestcraft has been as despotic as the religious priestcraft when endowed with unlimited power. And no one has proved it more bitterly than I have in my own personal experience.

Dr. Drury has the temerity to say that on account of the quotation from a speech of mine he has told certain officials, when challenged to meet me in public debate and to justify his numerous reckless assertions, that he will be ready with his answer if I will approach him directly. I know of no one who has ever received such a message. No such message has ever been conveyed to me. But I have seen several evasions from his pen of an altogether different type.

If Dr. Drury is as anxious as he professes to be to have a justification of my position and my views, let him meet me openly before any public or medical society that he may choose to select, and, upon his formulating his case, I will undertake to be present and defend myself and answer him. And to do away with any further excuse of "expense," I will be prepared to bear the whole burden of it out of my own pocket.—I am, etc.,

Gloucester, Dec. 12th. WALTER R. HADWEN.

PLAGUE AMONG EUROPEANS.

SIR,—I agree with the whole of Dr. W. J. Simpson's letter in the JOURNAL of November 19th, p. 1658, which conveys a very timely corrective against the opinion that white peoples, by reason of their race, have a special, or inherent, freedom from liability to plague—I am, etc.,

G. BAINBRIDGE, M.D.,
Surgeon-General, I.M.S. (ret.).

Bournemouth, Nov. 21st.

Medico-Legal.

GUARDIANS AND MEDICAL OFFICER.

Macnamara v. T. Shaw and Co.

THIS was an action for libel tried before Mr. Justice Ridley and a special jury on December 7th, 8th, and 9th. Mr. Clavell Salter, K.C., and Mr. Hugh Fraser, instructed by Messrs. Hempsons, appeared for the plaintiff, and Mr. Ralph Bankes, K.C., and Mr. Tyrrell Payne, instructed by Mr. G. M. Folkard, appeared for the defendants.

From Mr. Clavell Salter's opening it appeared that Dr. Macnamara, a medical man practising in Lewisham, and occupying the position of medical officer to the Ladywell Workhouse, an institution under the control of the Bermondsey Guardians, brought his action for libel against the proprietors, printers, and publishers of the *Southwark and Bermondsey Recorder* by reason of the publication of what he alleged to be an unfair, inaccurate, misleading, and malicious report of the proceedings at a meeting of the board of guardians. In 1909, in consequence of a scandal at the workhouse, entirely unconnected with the plaintiff, a Local Government Board inspector, Mr. Oxley, held an inquiry into the general conduct and administration of the workhouse. In his report he criticized three matters in connexion with the medical administration—namely, alcohol, diet, and tobacco—upon which the guardians, on a letter from the Local Government Board, called upon Dr. Macnamara to offer an explanation. This the latter did, and the matter was dealt with by the Workhouse (Ladywell) Committee of the guardians, who, without hearing the medical officer in his own defence, passed a condemnatory recommendation, and submitted a draft letter to the board of guardians to be forwarded to the Local Government Board. As a result of this the plaintiff, after correspondence with the board of guardians, appeared in person, and by his solicitor, Mr. Hempson, before them on January 27th, 1910. Dr. Macnamara then gave evidence, and the result of the proceedings was that the guardians considered no good purpose would be served by their making any observations on the subject-matter of the letter. On the day following the meeting of the guardians the defendants published the libel complained of—"Dr. Macnamara in trouble. The board discussed a report of the Ladywell Workhouse Committee relative to Dr. Macnamara's conduct at that establishment. The report was of a private character, and had reference to several items; one specially referred to the distribution of stimulants amongst the inmates. A particular feature of that distribution was that complaint having been made by the committee of what they considered an excess of supply, the medical officer ordered of the apothecary supplies of spirit. vini gallici. This was discovered by Mr. Oxley, Local Government Board inspector, on one of his visits. Consequently, the attention of the guardians was called to the fact, and Dr. Macnamara was asked for an explanation of his conduct. His report and observation were submitted to the guardians, and by them sent to the Local Government Board. They, in turn, asked for the guardians' observations thereon. A committee of the whole board recommended that the Local Government Board be informed that considering all the circumstances of the case, they did not consider Dr. Macnamara was a fit and proper person to retain the position of medical officer of the institution. Upon this report being formulated, Dr. Macnamara consulted the solicitor to the Medical Officers' Union, Mr. Hempson, with the result that that gentleman attended the board meeting, and by the method of treating Dr. Macnamara as a witness, endeavoured to exonerate him from all the charges contained in the report. The examination and subsequent discussion was conducted in the presence of Mr. Oxley, Local Government Board inspector, who attended for the purpose. After a long debate it was moved by Mr. Ecroyd that in the opinion of the guardians, as the Local Government Board had been supplied with the report and observations of the committee, no good purpose would be served by making further observations, and that the matter be left to the Local Government Board to decide. This proposal was seconded by Mr. Guerin, and after a long debate, in which many contradictory statements were made, it was carried by nine votes to seven."

The plaintiff and Mr. Hempson having given evidence, Mr. Ralph Bankes, for the defence, disclaimed any intention on the part of the defendants to make any attack upon Dr. Macnamara, and urged that the words complained of were a fair and accurate report of what took place at the meeting, were not libellous, and were published without malice and as a matter of public interest. He called Mr. Joseph Watson, editor and reporter of the *Southwark and Bermondsey Recorder*, and Mr. E. Pitts Fenton, Clerk to the Guardians, after which counsel addressed the jury.

Mr. Justice Ridley, in his direction to the jury, said that, while the question was for their decision, there was no doubt that what had appeared in the defendant's paper was a libel, inasmuch as, with observations, it held the plaintiff up to discredit, unless the defendants were protected by the Newspapers Act of 1888, in which case, if the jury were satisfied that what was published was a fair and accurate report of what took place at the meeting of the guardians, they would be entitled to say it was not libellous. Whilst it was proper to accord to the press that liberty and freedom of public criticism of all public matters which it ought to have, yet it must not be conducted in such a way as to deprive private individuals of their most precious possession—namely, their characters.

Turning to the facts, his lordship said, without blaming him in the least, that probably Mr. Oxley, the Local Government Board inspector, was the cause of all the trouble, and that if he had seen the plaintiff before writing his report, the jury would not have been troubled with the action. But the fact was the doctor, having been "brought to book," so to speak, by the inspector's report, was asked to make his observations thereon, which he did, and upon that the Ladywell Workhouse Committee of the guardians (not the committee of the whole of the guardians) reported that in their opinion the plaintiff was not a fit and proper person to be the medical officer, and recommended that their report should be adopted by the guardians. The committee's report and observations were sent to the Local Government Board, and there was therefore an accusation against the plaintiff, which he would have to answer before the guardians, as to whether he was entitled to retain his office. His lordship thought, speaking for himself and without desiring to place any emphasis upon it, that, before making so hostile a report about Dr. Macnamara, it would have been better if the committee had seen him again. He had, however, made his observations, and the committee thought, his lordship supposed, that he would have nothing to add if called upon. On the first occasion when the guardians met the plaintiff, although in attendance, was not called in. Through the intervention of his solicitor correspondence passed, and at the adjourned meeting he was admitted. He was then examined and cross-examined, and after the withdrawal of him and his solicitor, Mr. Hempson, a resolution was arrived at by nine votes to seven, and the matter was dropped Whilst it was for the jury to say what that amounted to, to him (the Judge) it seemed an acquittal of the plaintiff. It was true that there remained the possibility of the Local Government Board proceeding further, but no one suggested they were invited to do so, and, in point of fact, the time which had since elapsed showed that nothing further was intended to be done.

Having directed the jury on the law relating to the subject, his lordship dealt with the libel: "Bermondsey Guardians. Dr. Macnamara in trouble." Whilst the view might be taken that to say Dr. Macnamara had been acquitted was not absolutely correct and there was a scintilla of possibility of his being proceeded against, yet, considering that before the meeting took place he was in imminent danger of being turned out, the committee of the workhouse being against him and recommending that he was not a fit and proper person, and that after the meeting was over the board had decided to take no further steps, was it fair to say, "Dr. Macnamara in trouble?" Might it not have been said: "Dr. Macnamara out of trouble"? Dr. Macnamara, if not out of trouble, was out of immediate danger, at all events. And yet it was said: "Dr. Macnamara in trouble." Further, in the words complained of, there were: "This was discovered by Mr. Oxley, Local Government Board inspector, on one of his visits." Did that state the whole truth? It was for the jury to say what ordinary persons reading the report would understand. Would they think that it indicated that something had been found out at once and as a new discovery by Mr. Oxley, throwing suspicion upon the conduct of the doctor, who, it was suggested, had been buying brandy under the name of "spiritus vini gallici"? The whole truth would have been to say it had been going on since the year 1902, and the doctor had done it because, from his skilled knowledge as a doctor, he considered it ought to be done in that way. The expression, "A committee of the whole board," was inaccurate, although, perhaps, too much emphasis should not be laid on the matter. It was only half the truth to say Mr. Hempson "endeavoured to exonerate" the plaintiff by treating him as a witness: it was an endeavour in one sense, but it resulted in an acquittal. That was proved by the result, and, therefore, to say, "endeavoured to exonerate him" did not state the truth, but only half of it. What ought to have been stated was the fact that Mr. Hempson called the plaintiff, who gave evidence which induced the board of guardians to pass the resolution that they would proceed no further. Another thing was, might it not be thought that the "endeavour" failed? Further, when the total result had been what he (the Judge) thought was (subject to the jury's judgement) an acquittal of the plaintiff, it seemed a little unnecessary to put in that the matter was left to the Local Government Board, as though to say, with a nod of the head, that something might yet be done.

The defence was to take the report, expression by expression, and say it was true. The question was, Was it the whole truth or only half the truth? The Act of Parliament said that a report was privileged unless proved to be made maliciously; and unless, further, the defendant had been requested to insert a letter of apology, and had refused. In the present case the defendant certainly offered to insert a statement, but he had not been requested so to do, and his lordship doubted whether the proviso applied, and felt he was obliged to leave the question of malice to the jury. Having drawn their attention to the law on the point, the Judge pointed out that a week after the report a letter favourable to the doctor appeared above the signature "Argus," and under the heading, "Partisanship and Efficiency," an article stating that Dr. Macnamara, some years ago, resigned his seat on the board of guardians, and asking why so many of his Roman Catholic co-religionists voted for his appointment as medical officer. When the writer of the article was asked, "What did you do that for?" he said, "I was calling to mind a piece of history." That was an extremely damaging answer. What had they to do with history at all? The doctor had just been acquitted, and back goes the reporter in the following week to call up something which was thought to tell to his discredit. Under all the circumstances it was for the jury to say whether, if the report was a fair and accurate report, it was not deprived of the privilege claimed because of the malice exhibited by the subsequent publication.

Having directed the jury on the question of damages, the jury, after a short absence, found a verdict of £250 for the plaintiff and judgment was entered accordingly.

DEATH CERTIFICATION.

DUBIOUS.—With regard to the question, "What interval should be the maximum between seeing a patient and the patient's death—that would justify a certificate being given?" there is no fixed rule.

The Select Committee on Death Certification, 1893, recommended in their report that "attendance during last illness" should be defined as meaning "personal attendance by person certifying upon at least two occasions, one of which should be within eight days of death." But no coroner, we think, would regard this as the sole criterion in deciding whether to hold an inquest or not. It is impossible to lay down any hard and fast rule. Each case has to be considered on its merits. We certainly think it is not right or safe for a medical attendant to certify the cause of death if he has not seen the patient for several months, and did not then diagnose a condition which might be expected to end as and when it did in fact end.

A very safe rule, and one which is freely adopted in many coroner's jurisdictions, is to lay the facts fully before the coroner at the earliest possible moment, and signify willingness to certify if the coroner approves. If he does, the coroner signifies to the registrar that the case has been reported to him and that he does not propose to hold an inquest. The medical attendant is then free to give such certificate as he can truthfully give without straining the meaning of the words "attendance during last illness."

"Dubious" would not be justified in giving a certificate of death in the case he states. He saw the woman only once, and then her condition was not, presumably, very serious. Had it had been serious he would no doubt have seen her again or insisted on some one else doing so. In fact, she did not die until six months later, when he could not of his own knowledge certify anything as to the cause of death. All he could certify is that six months ago she had a disease which in his opinion might account for her death. It is obvious that death, for all he could say of his own knowledge, might be due to some cause not even remotely connected with her condition six months previously.

The proper course for "Dubious" to take would be to report all the facts to the coroner, and to express his opinion as to the probable cause of death, and, as far as possible, give his reasons. All responsibility would then be off his shoulders, and the coroner personally, or through his officer, would make such further inquiries as he might think necessary, on the result of which would depend his decision—(1) as to the necessity for inquest, (2) as to the necessity for *post-mortem* examination.

PARTNERSHIP EXPENSES.

V. V. V. sends us the following query: A. and B. have been partners in a practice for some years, and they share the profits equally. Owing to local changes it happens that A. does more work than B. and earns a much larger proportion of the income. Hitherto the expenses have been equally divided between A. and B., and A. now desires to have a motor car to do his work, and considers that as he makes more than twice as much of the income as B. the expenses ought not to be equally divided.

*** It is customary for the working expenses of a practice to be divided in the same proportion as the income, and not in proportion to the work done by the several partners. If A. has the use of the motor car solely, a very much larger percentage of the expenses will be expended on him than on B. If the deed of partnership between A. and B. has been properly drawn up the subject under discussion will have been duly settled, and it is neither equitable nor legal for either of the partners to endeavour to go outside that deed except by mutual consent. Most partnerships are for terms of years, and when the term has expired then is the time for making fresh arrangements to meet such inequalities as seem to have arisen in this partnership.

FEES TO COUNTY COUNCILLORS.

CHRISTOPHER GREY writes that he is a member of a county council which has appointed various committees, to some of which it has delegated statutory powers belonging to itself. By one of these—an education committee, consisting of members of the county council, school managers, and others interested in education—he was requested to report on two children after inspection. Afterwards, on sending in a bill for one guinea, payment was refused on the ground that he could not accept payment, being a member of the county council. On his pressing his claim he finally received a cheque, sanctioned by a minute of the County Education Committee, the payment being "at Dr. ———'s risk." Our

correspondent understood that where a committee of a county council has independent authority a member of the former, if not on the latter committee, might accept payment for services rendered.

*** Our correspondent had better consult his solicitor. We can only say that, although when a county council nominates an entirely independent authority, over which it has no control, our correspondent's contention would no doubt be correct, it is by no means clear that this education committee is an independent authority. The mere fact that some of the statutory powers of the council have been conferred on it does not make it so. It is therefore doubtful whether the acceptance of payment under the circumstances narrated is free from risk, taking into consideration the Local Government Act, 1888, and Section 75 of the same; and also Section 12, Municipal Corporations Act, 1882, together with Section 41 of the same Act, which lays down a fine of £50 for acting as a councillor after having become disqualified. In Nell *v.* Longbottom (I Q. B., 767, 1894) a member of a corporation was disqualified from exercising his public functions on account of having sold to his council oil to the value of 4d. If our correspondent wishes to remain a member of his county council he may be advised to return the guinea, since otherwise when he next exercises his functions as county councillor he may incur a serious liability.

WORKMEN'S COMPENSATION ACT.

Reports by Employer's Doctor.

C. F. W.—We are of opinion that it is not advisable for the medical man called in by the employers to make suggestions to employers with regard to treatment without communicating with the medical practitioner in charge of a case. In the case placed before us it would be advisable for the employer to endeavour to arrange a consultation between the medical inspector and the practitioner; a line of treatment could then be discussed.

Medico-Ethical.

The advice given in this column for the assistance of members is based on medico-ethical principles generally recognized by the profession, but must not be taken as representing direct findings of the Central Ethical Committee, except when so stated.

H. D. asks whether there is any objection to having a consulting-room in a town eleven miles away, where he would attend one day a week; and further, whether he might put on the brass plate the day of attendance.

*** There are precedents for practitioners in certain specialities possessing consulting-rooms in two places; but there are obvious inconveniencies in carrying on general practice in two places so far apart. It seems to us undesirable, and we do not approve that the door-plate should contain more than the practitioner's name.

RIGHT TO STATISTICS.

STATISTICS.—We are afraid any institution would claim the right to publish its own statistics, and that no paid medical officer has a legal or even a moral right to prevent such publication; but the reason given against immediate publication appears to have some force, and if brought properly before the authorities should receive due consideration.

SUPERSESSION.

H. L. writes: A. is referee for an insurance company in a large district. The company ask B., another practitioner in the same district, to become an additional referee, and B. consents, knowing that most if not all of the work will be diverted from A. to B. Is B. acting unprofessionally in accepting the appointment, and if so, what must be done in regard to those cases he has already examined and been paid for?

*** There would seem to be no ethical objection to B. accepting the appointment. Such transfers constantly take place.

INSURABLE INTEREST.

TRIPOS.—A creditor has unquestionably a legal as well as a moral right to insure the life of a debtor whose income stops at death.

The Services.

HEALTH OF THE NAVY.*

THE *Statistical Report of the Health of the Navy for the Year 1909* was issued on November 15th, 1910. Attention is called to the fact that owing to the reorganization of the Fleet in March, 1909, the Channel Fleet was absorbed into and became part of the Home Fleet. The returns from the Channel Fleet for the period prior to this reorganization have therefore been included in those from the Home Fleet.

Summary of Returns for Total Force.

The returns for the total force for the year 1909 show a continuous improvement in the general health of the Fleet as compared with the preceding five years. Not only are the case, invaliding, and death ratios for the year under review lower than the average ratios for the last five years, but the average loss of service for each person has further dropped from 10.8 to 9.76 days. The final invaliding ratio also shows a small decrease in comparison with the previous five years' average. The total force, corrected for time, in the year 1909, was 112,700, and the total number of cases of disease and injury entered on the sick list was 72,540, which gives a ratio of 643.65 per 1,000, a decrease of 75.34 as compared with the average ratio for the preceding five years. The number of entries per man for disease and injury was: Home Station, 0.76; Home Fleet, 0.56; Atlantic Fleet, 0.62; Mediterranean, 0.61; North America and West Indies with Fourth Cruiser Squadron, 0.71; China, 0.71; East Indies, 0.95; Australia, 0.61; Cape of Good Hope, 0.56; and the Irregular List, 0.85. For the total force the average was 0.64, a decrease of 0.05 as compared with 1908. The average number of men sick daily was 3,015.25, giving a ratio of 26.75 per 1,000—a decrease of 2.84 in comparison with the previous five years. The total number of days' sickness on board and in hospital was 1,100.568, which represents an average loss of service of 9.76 days for each person, a decrease of 1.04 in comparison with the average for the preceding five years. The ratio per 1,000 of men sick daily on the various stations was: Home Station, 35.42; Home Fleet, 23.19; Atlantic Fleet, 24.01; Mediterranean, 23.83; North America and West Indies and Fourth Cruiser Squadron, 25.42; China, 28.09; East Indies, 25.78; Australia, 20.41; Cape of Good Hope, 20.14; and the Irregular List, 45.76. For the total force the ratio was 26.75. As was the case in the preceding four years, the Cape of Good Hope shows the lowest, and the Irregular List the highest, sick-rate.

Invalidings.

The total number invalided was 2,007,† which gives a ratio per 1,000 of 17.8, a decrease of 4.3 per 1,000 in comparison with the average ratio for the preceding five years. The total number of persons finally invalided was 1,764, of whom 66 were invalided after refusing operative treatment. The ratio per 1,000 of final invalidings was 15.65, a decrease of 0.86 per 1,000 as compared with the average for the previous five years. Of the 2,007 invalids, 1,851, giving a ratio of 16.42 per 1,000, were for disease, and 156, a ratio of 1.38 per 1,000, were for injury. In comparison with the average ratios of the previous five years, the ratio per 1,000 of force invalided has decreased in the Mediterranean from 31.49 to 17.64; in China, from 22.63 to 17.43; in the East Indies, from 34.37 to 25.53; in Australia, from 18.41 to 9.79; Cape of Good Hope, from 22.14 to 14.15; Atlantic Fleet, from 23.86 (four years' average) to 16.29; North America and West Indies, with Fourth Cruiser Squadron, from 18.51 (four years' average) to 16.04; in the Home Fleet, as compared with an average of the Home and Channel Fleets for 1908, from 15.86 to 14.15; and on the Home Station, as compared with 1908, from 27.93 to 26.42. Only in the Irregular List has there been a fractional increase, namely, from 16.81 to 16.85.

Deaths.

The total number of deaths was 362, giving a ratio of 3.21 per 1,000, a decrease of 0.54 in comparison with the average ratio for the last five years. Of this number, 258, or 2.28 per 1,000, were due to disease, and 104, giving a ratio of 0.92 per 1,000, to injury. In comparison with the death ratios of the preceding five years, the ratio per 1,000 decreased from 3.94 to 2.01 in the Mediterranean; from 4.02 to nil at the Cape of Good Hope: from 4.02 to 1.12 in the Irregular List; from 3.02 (four years' average) to 2.32 in the Atlantic Fleet; from 3.1 (four years' average) to 2.46 in the North America and West Indies with Fourth Cruiser Squadron; and from 4.05 (average of the Home and Channel Fleets for 1908) to 2.73 in the Home Fleet. There were increases in four stations—namely, in China, the East Indies, and Australia—from five years' averages of 4.15, 7.83, and 4.19 respectively to 4.78, 9.04, and 6.52, and on the Home Station, where the ratio was 4.11 as compared with 3.04 in 1908.

* London: Printed for His Majesty's Stationery Office, by Eyre and Spottiswoode, Ltd., Printers to the King's Most Excellent Majesty. And to be purchased, either directly or through any bookseller, from Wyman and Sons, Ltd., Fetter Lane, E.C., and 32, Abingdon Street, Westminster, S.W.: or Oliver and Boyd, Tweeddale Court, Edinburgh: or E. Ponsonby, Ltd., 116, Grafton Street, Dublin. (Price 1s 2d.)

† This number includes men temporarily invalided from foreign stations, many of whom are again able to join the active force. The number finally invalided represents the waste of the service from this cause during the year.

General Diseases.

The following is a summary of the returns under the head of general diseases:

Small-pox.—No single case was recorded during the year among over 100,000 men, a large proportion of whom, as on the East Indies, China, and Mediterranean Stations, are exposed to considerable risk of infection.

Cow-pox.—482 cases, 370 of which were from the Home Station and 42 from Australia.

Chicken-pox.—13 cases; 12 from Home waters and 1 from the Cape of Good Hope.

Measles.—159 cases; 92 from the Home Station, 50 from the Home Fleet, and 11 from the North America and West Indies with the Fourth Cruiser or Training Squadron. This is an improvement on 1908, when 231 cases were recorded.

Rubella.—109 cases; 59 from the Home Station and 33 from the Home Fleet.

Dengue.—14 cases; 4 from China and 10 from Australia.

Mumps.—156 cases; 60 from the Home Station and 83 from the Home Fleet.

Influenza.—2,280 cases with 4 deaths, giving a decrease in the case ratio of 4.24 per 1,000 as compared with the average for the preceding five years. The Home Station contributed 639 cases, the Home Fleet 1,218, and the Mediterranean 109 cases.

Scarlet Fever.—138 cases, with 1 invaliding and 1 death. The Home Station contributed 69, the Home Fleet 38, the Atlantic Fleet 15, the Fourth Cruiser Squadron while in home waters, 4, the Mediterranean 5, and Australia 7 cases.

Diphtheria.—35 cases, with 1 invaliding and 1 death, giving a case ratio practically identical with the average. The Home Station returned 22 cases and the Home Fleet 7.

Enteric Fever.—150 cases, with 28 deaths. The case and death ratios per 1,000 were 1.33 and 0.24 respectively, as compared with 1.67 and 0 25, the average ratios for the preceding five years. The Home Station returned 31 cases; the Home Fleet, 46; the Atlantic Fleet, 8; the Mediterranean, 30; North America and West Indies, with Fourth Cruiser Squadron, 8; China, 9; East Indies, 6; Australia, 5; Irregular List, 7; while the Cape of Good Hope is the only station where no case of the disease is reported.

Malta Fever.—16 cases are recorded, giving a case ratio of 0.14 per 1,000 as compared with an average ratio of 1.92 for the previous five years. This compares unfavourably with 1908, when only 9 cases were recorded, but it is to be noted that the 5 cases contributed from the Home Station and Home Fleet were all recurrences of previous infections, while the 11 entries recorded on the Mediterranean Station referred only to 10 individuals. Unlike 1908, no case was invalided from the Service, and there were no deaths, while the number of days lost to the Service totalled 900, as compared with 1,000 in 1908 and 30,541 in 1903.

Pyrexia.—411 cases. The East Indies contributed 183, China 82, and the Mediterranean 69. The case ratio per 1,000 was 3 64, as compared with an average of 5.58 in the previous five years.

Cholera.—2 cases from China, 1 fatal.

Dysentery.—55 cases, with 1 final invaliding and 3 deaths. The East Indies furnished 22 cases and China 14.

Pneumonia.—472 cases, with 4 final invalidings and 37 deaths. The Home Station with 218 entries, and the Home Fleet with 148, contribute the large majority, but every station reports some cases.

Malaria.—611 cases, with 9 invalidings from foreign stations, but only 3 final invalidings, and 2 deaths. The case, invaliding and death ratios per 1,000 were 5.42, 0 02, and 0 01 respectively, as compared with 5 09, 0 01, and 0 02, the average ratios for the previous five years. Although not such a bad year for malarial diseases in the East Indies as 1908, this station once again heads the list with 273 cases, while the Mediterranean contributes 79. The highest case ratios are furnished by the East Indies, 145.21; Cape of Good Hope, 21 23; China, 11.49; and the Mediterranean, 7.96. The total number of cases (611) does not imply that that number of men was affected, as a large number of relapses occurred.

Septic Diseases.—27 cases, all erysipelas.

Tuberculosis.—320 cases, with 209 final invalidings and 22 deaths. The case, invaliding, and death ratios per 1,000 were 2.83, 1 85, and 0 19, as compared with an average for the preceding five years of 3 24, 2.41, and 0 38 respectively. The total of 320 in reality only represents 315 individuals affected, as 5 are shown twice on the sick list. Of the whole number, pulmonary tuberculosis contributed 253 cases; joints, 17; glands, 10; testicle, 15; peritoneum, 4; kidney, 1; and larynx, bones, and skin, 2 each; general tuberculosis, 9, with 7 deaths; while pulmonary tuberculosis caused 13 and tuberculous peritonitis 2 deaths. The East Indies contributed the highest case ratio, and the Atlantic Fleet the lowest.

Venereal Diseases.—The total number of cases recorded is 13,474—namely, chancroid, 2,364; syphilis (primary), 954; syphilis (secondary), 3,278; gonorrhoea and sequelae, 6,878. There were 155 final invalidings—namely, 1 for chancroid, 107 for secondary syphilis, and 47 for gonorrhoea and sequelae. Seven of the 8 deaths were due to secondary syphilis, and 1 to gonorrhoea. The case, invaliding, and death ratios per 1,000 were 119.55, 1.35, and 0.06 respectively, as compared with 120.19, 1.33, and 0.05, the average ratios for the preceding five years. The total number of days' loss of service was 325,889, while the average daily number of men ineffective from these diseases was 892.84, as compared with 889.15 in 1908, and 903.9 in 1907. The China Station shows the highest case ratio per 1 000 with 164.16, closely followed by the Irregular List with 163.46, and the Home Station coming next with 143 33. Australia, which in 1908 headed the list and has almost always shown a high ratio, shows 111.25, an interesting fact in view of the legislative action recently taken in New South Wales.

Rheumatic Fever.—814 cases, with 60 final invalidings and 3 deaths. As in 1908, the case ratio shows a decided increase (3 76), which is possibly in part due to the concentration of the Fleet in the cold and stormy Home waters, and to more careful classification. Of the total (814) the Home Fleet and Station return 298 and 269 cases respectively, the Atlantic Fleet 50, and the Mediterranean 80.

Other Infective Diseases.—18 cases, which include 5 cases of septicaemia with 3 deaths; 3 of pyaemia with 4 deaths from that disease; 1 of acute toxaemia, which proved fatal; 2 of acute infective periostitis, with 1 invaliding and 1 death; 1 of cerebro-spinal meningitis, with 1 invaliding; 1 of osteo-myelitis, and 2 invalidings for that disease; 1 of actinomycosis, and 1 of whooping-cough. Where deaths and invalidings exceed the number of cases, the difference represents entries left over from 1908.

Parasitic Diseases.—3,669 cases, of which scabies represented 3,564. The Home Fleet contributed 1,596 of the latter, the Home Station 1,453 and the Atlantic Fleet 217.

Poisons.—111 cases, with 1 final invaliding and 4 deaths. Lead poisoning was responsible for 21 cases, and ptomaine for 57; 1 of the latter was invalided. It is stated that the deaths were the result of carbolic acid, coal gas, carbon monoxide, and gas and ether given as an anaesthetic.

Alcoholism.—115 cases, with 1 final invaliding and 4 deaths.

Gout.—197 cases.

New Growths.—173 cases of "non-malignant," and 13 cases of "malignant"; of the latter 8 died.

Diabetes.—7 cases, with 3 invalidings and 1 death.

Other General Diseases.—Under this heading 96 cases are recorded, and include 22 of beri-beri, 10 of scurvy, 32 of anaemia, and 3 of pernicious anemia, 2 of goitre and 2 of exophthalmic goitre, 10 of "general debility," 3 of chorea, 2 of osteo-arthritis, 4 of purpura, and 1 each of sprue, obesity, and defective growth and weight. Five cases of beri-beri and 2 of pernicious anaemia died.

Local Diseases.

The following is a summary of the diseases under the heading of "Local Diseases."

Diseases of the Nervous System.—781 cases, with 248 final invalidings and 21 deaths. The case, invaliding, and death ratios per 1,000 are 6.92, 3.17, and 0.17 respectively, as compared with 8 38, 2.41, and 0.13, the average ratios for the preceding five years. "Nervous diseases" accounted for 700 cases, with 209 invalidings and 19 deaths; and "mental diseases" for 81 cases, 39 invalidings, and 2 deaths.

Diseases of the Eye.—790 cases, with 125 final invalidings.

Other Organs of Special Sense.—540 cases, with 120 final invalidings and 8 deaths. Ear diseases accounted for 489 cases, 113 final invalidings, and all the deaths.

Diseases of the Circulatory System.—598 cases, with 180 final invalidings and 36 deaths. Organic heart disease accounted for 199 cases, with 137 final invalidings and 25 deaths; functional heart disease for 151, of which 12 were finally invalided; aneurysm for 12, of which 5 were invalided and 6 proved fatal; diseases of veins, 213; and other diseases included under this system, 23, with 5 deaths.

Diseases of the Respiratory System.—7,762 cases, with 53 final invalidings and 12 deaths. The case ratio shows a decrease of 4.56 per 1 000, in comparison with the average ratio for the preceding five years. "Catarrh" furnished 6,617 of the cases under this heading.

Diseases of the Digestive System.—11,691 cases, with 274 final invalidings and 20 deaths, giving case, invaliding, and death ratios per 1,000 of 103.73, 2.43, and 0 17 respectively, as compared with 107 82, 2 06, and 0.23, the average ratios for the preceding 5 years. Mouth and teeth diseases accounted for 917 cases, sore throat for 2,389, tonsillitis for 3,208, diseases of the stomach for 1,075 and of the intestines for 2,897, hernia for 696, haemorrhoids for 329, hepatitis for 42; other diseases of the liver, chiefly catarrhal jaundice, for 138. The highest case ratios were furnished by the Home station, the Irregular List, and the East Indies, and the lowest by the Home Fleet and Australia.

Diseases of the Lymphatic and Glandular System.—450 cases, with 3 final invalidings.

Diseases of the Urinary and Generative System.—935 cases, with 82 final invalidings and 14 deaths. Diseases of the kidneys accounted for 13 deaths, and the remaining death was due to stricture.

Diseases of the Organs of Locomotion.—1,531 cases, with 70 final invalidings and 1 death. Diseases of the joints furnished 21 of the final invalidings.

Diseases of the Connective Tissue and Skin.—8,268 cases, with 15 invalidings and 1 death from intra-abdominal abscess. The case ratio varied from 155.19 in the East Indies to 60.04 and 60.35 in the Home Station and Fleet respectively.

Injuries.

(*a*) *General.*—285 cases, with 3 final invalidings and 80 deaths, giving very similar case and invaliding ratios to the average for the preceding five years. The deaths were due to: Burns and scalds, 9; heat-stroke, 3; multiple injury, 9; drowning, 58, as compared with 98 in 1908, when the total was swollen by the *Gladiator* and *Tiger* disasters. The unfortunate sinking of submarine C 11, with a loss of 13 lives, and the pinnace of the *Encounter*, with a loss of 15, were the chief accidents of the

sort to be recorded in 1909. Three cases of caisson disease are recorded.

(*b*) *Local.*—14,760 cases, with 137 invalidings and 15 deaths, giving a case, invaliding, and death ratio per 1,000 of 130.96, 1.21, and 0.13, as compared with 148.43, 1.17, and 0.16 respectively. The one case of wound in action was a recrudescence of trouble from a wound received years ago in South Africa.

Suicide.

Ten deaths are returned under this heading. The case ratio shows a decrease of 0.03 in comparison with the average for the preceding five years.

Papers.

In an appendix to the report are records of cases of caisson disease by Fleet Surgeons J. McIlwee and R. C. Munday, Surgeon H. D. Drennan, Surgeon E. R. Lockwood Thomas, and Staff Surgeon J. H. Lightfoot; and papers by Fleet Surgeon W. W. Pryn on tests for colour vision; reports on the examination of eyesight at gunnery schools, by Fleet Surgeon A. G. Wildey and Fleet Surgeon W. A. Whitelegge. Papers are also contributed by Staff Surgeon Oswald Rees on stoker's cramp; by Staff Surgeon C. H. J. Robinson on heat cramp; by Fleet Surgeon F. H. A. Clayton on the effects of heat on H.M.S. *Cressy* in 1903. Staff Surgeon W. H. Pope reports on an outbreak of scurvy on board H.M.S. *Philomel*. There is a paper on urticarial fever by Surgeon J. Verdon, one on beri-beri by Staff Surgeon A. J. Laurie, and one on the serum diagnosis of syphilis by Fleet Surgeon P. W. Bassett-Smith.

GLASGOW R.A.M.C. TERRITORIAL UNITS.

AT the monthly meeting of the Glasgow Territorial Force Association, held on December 6th, the minutes of the Recruiting and Property Committee submitted contained a paragraph regarding R.A.M.C. hall accommodation. A letter had been received from the Assistant Financial Secretary at the War Office stating that, in view of the reports by the A.M.O. and the Adjutant of the School of Instruction, he was prepared to recommend that sanction be given for the erection of a drill hall of the size applied for if the association would agree to modify the sizes of the various rooms. It was agreed to ask the A.M.O. whether he would accept the proposal, and, if so, the secretary was instructed to write the War Office accordingly. The association approved of the minute. The table of strengths of units submitted showed the Lowland Mounted Brigade Field Ambulance to be 3 short of establishment owing to withdrawals of time-expired men; the 1st Lowland Field Ambulance 7 short; the 2nd Lowland Ambulance 8 short; the 3rd Scottish General Hospital 1 short; and the 4th Scottish General Hospital up to establishment.

GLASGOW R.A.M.C. OFFICERS' MESS DINNER.

THE annual mess dinner of the Glasgow R.A.M.C. Territorial Officers has been fixed for February 18th in the Grosvenor Restaurant, Gordon Street, when the Director-General of the Army Medical Services will be the guest of the officers.

Public Health AND POOR LAW MEDICAL SERVICES.

SUSPECTED BOVINE TUBERCULOSIS.

THE case in which a farmer appealed against an order of the Corporation of Sunderland prohibiting him from delivering milk in the borough from three of his cows on the ground that the medical officer had reason to suspect the animals were suffering from tuberculosis was reported in the BRITISH MEDICAL JOURNAL of December 3rd, page 1831. The presiding barrister, after hearing the evidence on both sides, intimated that he would report to the Board of Agriculture and Fisheries. The Board has now decided that the order of the Corporation was made without due cause so far as it related to the three cows in question, and they found that George Greenshields was not in default, and withdrew the order against him, the costs of the appeal to be paid by the Corporation.

WHOOPING-COUGH AND SCHOOL ATTENDANCE.

PERTUSSIS.—In the Memorandum on Closure of and Exclusion from School issued by the Local Government Board in September, 1909, it is stated that the rules for the exclusion from school for whooping-cough should be similar to those for measles, except that the infection of whooping-cough probably lasts six weeks, and the children in the house who attend the infant school should, therefore, be excluded from school for this period—or as long as the cough continues. The procedure recommended in the memorandum as regards contacts living in measles-infected houses is to exclude from school attendance only those children of the same household who attend the infant school, and those older children of the same household who have not had measles. It is admitted that this procedure is a compromise which is obviously not a counsel of perfection and may need future modification. Even under present conditions it may need to be modified in accordance with the special circumstances of a particular district.

DUTY OF CLUB DOCTORS WHEN THEIR PATIENTS BECOME PAUPERS.

H. asks for our opinion on the following case: A. is a member of a friendly society and I am his doctor. A. has a long illness, and as his club pay becomes reduced, and having a family, is compelled to apply to the parish for relief, and is there allowed the services of the parish doctor. The club say that *I must* attend him. Is this so?

*** We cannot give a decisive answer to this question, as we do not know the terms on which our correspondent accepted the office of medical attendant on the members of A.'s club. We may, however, suggest that it is probable that the Poor Law medical officer was called upon by the guardians to certify to A.'s incapacity for work, etc., and not for the purpose of providing the patient with medical attendance. If such be the case, it would be well for our correspondent and the district medical officer of the union to come to an amicable arrangement in order that the unfortunate patient may by means of the certification by the former continue to receive all he is entitled to from his club, and by the certificates given by the latter be able to secure all the parochial assistance which his case demands.

THE PLAGUE.

PREVALENCE OF THE DISEASE.

JAPAN.

DURING April, May, and June the fresh cases of plague numbered 4, 9, and 9 respectively; the deaths from the disease amounted during these months to 3, 5, and 9 respectively. In Formosa during the three months in question 17 cases were reported and 13 deaths.

CHINA.

Plague has occurred in Hankow, Pakhoi, Chao Yang, Canton, Fatchow, Hsin Heri, and Sunning district, Hoihow, Kiunghow, Lintschow (near Canton), and Lienchow during the summer months of 1910. No exact returns are procurable.

STRAITS SETTLEMENTS.

A few cases of plague, for the most part imported, occurred in Singapore during the month of May, 1910. Not more than 6 cases in all were notified. On June 22nd Singapore was declared free from plague.

SIAM.

During the months of April, May, and June, 1910, the plague cases reported numbered 30 and the deaths from the disease 29. Previous reports show that between November 1st, 1909, and April 1st, 1910, the fresh cases of plague amounted to 78 and the deaths from the disease to 72.

TURKEY IN ASIA.

During the month of May, 1910, plague caused in Djedda 1 death, in Loheia 27 deaths; in Hadhur, inland from Loheia, a serious epidemic prevailed. In Basra, during June, July, and August, 4 cases and 4 deaths from plague occurred.

PERSIA.

In Bushire plague disappeared gradually during June, and on July 2nd the port was declared free from the disease.

EGYPT.

During July and August (to the 12th) 85 cases of plague were reported in Egypt, and 38 deaths from the disease.

TUNIS.

Plague was detected in the port, but all the cases were imported.

RUSSIA.

In the Astrachan district and in Odessa cases of plague were reported during the months of June, July, and August—22 cases in all and 19 deaths from the disease.

SOUTH AMERICA.

Brazil.—Two cases of plague in Bahia, and 1 case in Brazil in April.

Chile.—During June and July no cases reported.

Ecuador.—During June 6 cases of plague reported and 1 death.

Venezuela.—Plague prevailed during July and August in Caracas.

Peru.—During May and June plague was reported from the Arequipa Department. Between October 1st, 1909, and April, 1910, the cases reported numbered 379, with 95 deaths in all Peru.

ENGLAND.

Four deaths from pneumonic plague occurred in the month of September, 1910, in the county of Suffolk. Rats and other rodents were found infected.

Obituary.

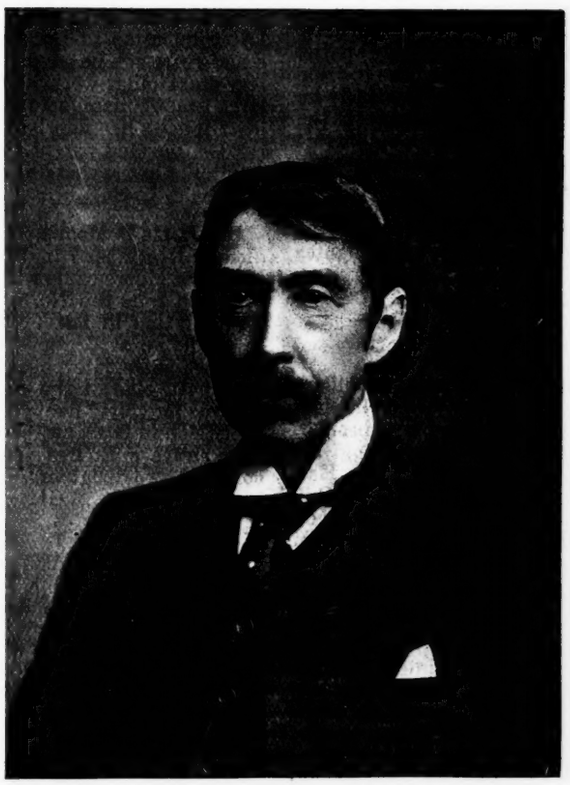
WILLIAM HENRY HORROCKS,

M.B.LOND., F.R.C.S.ENG.,

SENIOR HONORARY SURGEON TO THE BRADFORD ROYAL INFIRMARY.

IT is with feelings of profound regret that we have to record the death of Mr. W. H. Horrocks of Bradford. Mr. Horrocks had been in the active practice of his profession up to six or seven weeks previous to his decease, and his well-known personality and influence were in such constant evidence in the life of Bradford that it is difficult to realize that they have passed irrevocably out of it. The memory of his skill, of his work for his profession and his sacrifices for the poor will, however, long remain as an inspiration to his successors and a source of happiness to his townsmen.

Mr. W. H. Horrocks was the second son of the late Dr. W. H. Horrocks of Blundellsands, Liverpool, and was born on the 18th of June 1857. He received his medical education at University College, Liverpool; Owens College, and University College, London. He took the Membership of the Royal College of Surgeons in 1882, the Licentiateship of the Apothecaries Society in 1883, and graduated M.B. of the University of London in 1886, taking Honours in Forensic Medicine, Physiology and Botany. In the latter year he also obtained the Fellowship of the Royal College of Surgeons. Shortly after graduating Mr. Horrocks acted for some months as a Junior Resident at the Rotunda Hospital, Dublin. He always spoke of his residence at the Rotunda as having been of invaluable service to him in his later career. For nearly three years Mr. Horrocks acted as Resident Surgeon to the Northern Hospital, Liverpool — first as Ambulance Surgeon and later on as a House-Surgeon. He then returned to London for one year as Demonstrator of Anatomy at University College. He next received the appointment of House-Surgeon at the Bradford Infirmary, remaining in the city of his adoption from that time until his death on December 5th. Mr. Horrocks was an excellent house-surgeon. His wide and solid surgical education, his keen insight into character, his sympathy with suffering, and his administrative talent all combined to this happy result. He continued in residence at the Infirmary for two years and a half, eventually resigning to take up a partnership in the town with Dr. Rabagliati. In 1891 he was elected Honorary Assistant Surgeon to the Infirmary, and in 1892 he was appointed to the full staff. Mr. Horrocks remained in partnership with Dr. Rabagliati for some years, but eventually it was decided to carry on the work separately. Although in general practice, Mr. Horrocks was called into consultation, especially for operative surgery, by a large number of medical men in Bradford and the surrounding towns and districts.



The Bradford Medico-Chirurgical Society has been largely indebted to Mr. Horrocks for the great enthusiasm with which he worked for it. He was an honorary member during the time of his house-surgeoncy at the infirmary, and was elected an ordinary member on resigning that position. Until his death he was a constant attendant at its meetings, reading many papers and exhibiting a large number of specimens. He was elected President of the Society for 1899–1900, and gave as his presidential address "Sir Astley Cooper—His Life and Times." This excellent and most interesting address was after reprinted in book form and circulated amongst a large number of medical friends.

Mr. Horrocks was greatly interested in the work of the British Medical Association, and was elected Representative in Representative Meetings of the Association at the inaugural meeting of the Bradford Division on May 6th, 1903. He served in this capacity until 1908 He became Vice-Chairman in 1907 and Chairman in 1908, giving, as his introductory address, a paper on "Quacks and Quackery." He also represented the Division on the Yorkshire Branch Council. He read many papers, both on scientific and medico-political subjects, before the Division, and his report on the work of the Representative Meeting was always a feature of the session. Although he considered the Representative Meeting was a most useful and necessary part of the Association, he was somewhat antagonistic to the idea that the Representative Body should be supreme. He considered that the Council should be able, if desired, to veto any resolution of the Representative Body it considered unwise.

In addition to his *Life* of Sir Astley Cooper, Mr. Horrocks was also the author of "Medical Notes on the Life of Edward Gibbon." He contributed an article on "Resection of the Intestine for Malignant Disease" to the BRITISH MEDICAL JOURNAL, afterwards quoted in Jacobson's *Surgery*; also an article on "Porro's Operation and a Suggested Modification" in the same journal; articles on "Atresia Ani Vaginalis" and "Pylorectomy for Carcinoma" to the *Lancet*, and "Gastroplication for Dilatation of the Stomach" to the *Annals of Surgery*. Other articles were contributed to the *Quarterly Medical Journal* and the *Provincial Medical Journal*. Mr. Horrocks was widely read in general literature, and had written papers on "Some Political Opinions of C. E. Fox" and "Political Caricatures." He took an especial interest in old prints. His knowledge of the latter was very extensive, and his greatest delight was to get an interested friend into his study and read the history of the past through the medium of his prints. His coloured prints were especially beautiful and rare, and he had probably one of the finest collections of old prints of distinguished medical men in the country.

A man of indomitable energy but of somewhat delicate physique, it can be easily understood how his various activities were likely to put a strain on his constitution. This, alas! was the case, and was the immediate cause of his untimely end.

At the service at the Church of St. Paul's there was probably a larger gathering of medical men than had ever been seen in Bradford before. In addition to these were the Lord Mayor and the Vicar of Bradford and a great number of sorrowing relatives, friends, and patients. The people amongst whom he worked went to show their sorrow and mourn their loss. In Mr. Horrocks they had lost a kind friend, a sympathetic adviser, and a great doctor, and his sorrowing wife, his son, and daughter a devoted and loving husband and father.

COLIN MACKENZIE, M.B., C.M.ED., D.P.H.R.C.S.ED,
TRINITY, EDINBURGH.

WE regret to record the death, from enteric fever, of Dr. Colin Mackenzie, which took place at his residence on the morning of December 4th, 1910. Dr. Mackenzie was born at Ullapool, Ross-shire, on December 6th, 1854, and received his early education first at Dingwall, and afterwards at Daniel Stewart's College, Edinburgh. He then proceeded to the study of medicine in the University of Edinburgh, where he graduated M.B., C.M. in 1877. In 1890 he took the Diploma of Public Health of the Royal College of Surgeons of Edinburgh. After graduation he was appointed House-Surgeon to Leith Hospital, and he acted as assistant to the late Dr. Murray of Leith. Later he settled at Tain, where he quickly built up a large practice, and was held in high esteem. Fourteen years ago he moved to Trinity, one of the suburbs of Edinburgh, and soon established himself as one of the leading practitioners of the district. As a doctor he was very successful, endearing himself to his patients not only by his efficiency and skill, but by his kindly ways and his tender solicitude for the welfare of his patients. He was much respected by his fellow practitioners.

With his fine physique, Dr. Mackenzie was essentially an outdoor man, and an ardent lover of all manly sports. Latterly his chief recreation was golf, in which he became so proficient that he carried off many prizes. Formerly he was a Lieutenant in the Volunteer Battalion of the Seaforth Highlanders, and was awarded the long service medal. He was an enthusiastic Freemason, and held the office of R. W. Master of Lodge St. Duthus at Tain. After coming to the Edinburgh district he was one of the founders of Lodge Trinity, and was elected its first R. W. Master. He leaves a widow, a son, and a daughter to mourn his premature death.

WILLIAM HALL, M.D., J.P.,
LANCASTER.

WE regret to record the death in November of Dr. William Hall, of Elmsfield, Lancaster, a town with which he had been connected all his life, and in which he had been in practice for some forty years. After completing his general education at Lancaster Grammar School, Dr. Hall went to Edinburgh, where in 1871 he became L.R.C.P. and S., and then joined his father in practice. Later on he became F.R.C.S.Edin. and M.D.Brux. At the time of his death he was Senior Surgeon to the Lancaster Infirmary; his services to it were long and great, for besides holding a post on its staff for over thirty years, he had taken a large part in its management, being elected President of the Governing Body in 1904 and again in 1905. His father had held a like position, and the services to the institution of son and father together aggregated sixty-seven years.

Besides carrying on a large practice, Dr. Hall at one time played a part in the municipal affairs of the locality as a member of the Town Council. For several years he was Chairman of the Tramways Company, and he held a commission in the Artillery Volunteers long enough to obtain the rank of Surgeon-Colonel. He was an old and active member of the British Medical Association, and at one time President of its North Lancashire Branch. He had also been President of the Lancaster Medical Book Club, and held a considerable number of appointments, including the Surgeoncy of the London and North-Western Railway.

Dr. Hall, who was in good health up to within two or three days of his death, is survived by a widow and five daughters. Some ten years ago his name was added to the Commission of Peace for the borough.

BRIG.-SURG.-LIEUT.-COLONEL JOHN ROSS MURRAY, M.D., F.R.C.S.E.

ON November 17th, at Gipsy Hill, an old officer of the medical service of the army passed away in the person of Brigade-Surgeon-Lieutenant-Colonel John Ross Murray, who graduated M.D.Edin. in 1858, and F.R.C.S.E. in 1889.

He joined the army as a Staff Assistant Surgeon in June, 1861, his commission being antedated in recognition of valuable services rendered during the New Zealand war as an acting Assistant Surgeon. He was gazetted to the 107th Foot in 1863, and to the Royal Artillery in 1868, in which regiment he remained until the introduction of the unification scheme in 1873. In 1875 he was promoted Surgeon-Major, and shortly after this his services were specially mentioned by the Commander-in-Chief in India for good work done during a cholera epidemic at Lucknow. In 1889 he was promoted Brigade-Surgeon-Lieutenant-Colonel. He served in India and Bermuda with distinction, and during the New Zealand campaign was present in three actions, receiving the medal. He retired in 1892. He was a member of the British Medical Association for many years.

DR RICHARD LORD, who closed a long and honourable career at Ealing in his seventy-third year, on November 5th, received his medical education at Edinburgh, where he took the degree of M.D. in 1862, choosing as the subject of his thesis "Synovial Membranes, with Especial Reference to the Bursae Mucosae." In the following year he was admitted a Member of the Royal College of Surgeons of England. He practised principally in Crewe, where he was Medical Officer of Health, and made his name as a skilful, devoted, and conscientious practitioner. Later he came to London, and practised at Notting Hill. Some years ago he gave up his general practice for laboratory and similar work, and acted as medical adviser to a large firm of manufacturing chemists. His death after a brief illness has deprived Dr. Lord's family of an affectionate, devoted parent and his many friends of a capable counsellor and a cheerful, unselfish companion.

DR. JAMES T. MOORE, 27, Buckingham Terrace, Glasgow died on December 7th at his residence, in his seventy-sixth year. Dr. Moore came with his brother, the late Dr. Samuel J. Moore, from the North of Ireland, and, after teaching for some time in Paisley, the brothers took up the study of medicine at Glasgow. Dr. James graduated in 1869, and two years later became M.D. He first practised on the south side of the city, subsequently removing west. He was for thirty-five years a prominent member of the profession in Glasgow, but owing to his health he retired from active work five years ago. He is survived by two sons and two daughters, one of his sons, Dr. S. J. Moore, being in practice in Glasgow.

DR. STEVEN, who died on December 5th at the age of 81, was the senior member of the Association in Dundee. Dr. Steven was a native of Dundee, and served his apprenticeship to Dr. Cocks there, acquiring then the bent which later made him for so many years Surgeon to the Dundee Eye Institution. Dr. Steven had retired from practice some time ago, but was brisk and active to the end. He was much liked by his colleagues, though of a retiring disposition. He was unmarried.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

THE following degrees have been conferred:

M.D.—G. H. A. C. Berkeley.
M.B.—L. S. T. Burrell, R. Crawford, G. Graham, A. Hamilton.
B.C.—L. S. T. Burrell, R. Crawford, A. Hamilton.

GLASGOW UNIVERSITY COURT.

AT a meeting of Glasgow University Court held on December 8th, Principal Sir Donald MacAlister presiding, Professor Phillimore was welcomed as the assessor appointed by the Senatus. A recommendation that Professor Bryce be appointed honorary curator of the anatomical collections in the Hunterian Museum was confirmed.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary council was held on December 8th, Mr. H. T. Butlin, President, in the chair.

Issue of Diplomas.

Diplomas of Fellowship were granted to twenty-four candidates found qualified at the recent examination.

Diplomas of the Licence in Dental Surgery were granted forty-two candidates found qualified for it.

Annual Meeting of Fellows and Members.

At this meeting, held on Thursday, November 17th, a resolution was passed affirming the desirability of admitting Members to direct representation on the Council. To this resolution the Council returned the answer that, as the matter referred to in the resolution was fully considered by the Council during the present year, they are not prepared to reopen the discussion.

Vacancy on the Court of Examiners.

The President reported that a vacancy had occurred, which would be filled up in January, 1911. Any Fellow wishing to become a candidate must apply in writing to the Secretary.

General Medical Council.

The thanks of the Council were given to Sir Henry Morris for his services as representative of the College on the General Medical Council.

Memorial to King Edward.

A letter was read from the Right Hon. the Lord Mayor announcing the opening of the Mansion House Fund for providing a memorial to King Edward in London, and asking the President to bring the appeal to the notice of members of the College living in London.

Scale of Medicines in Mercantile Marine.

A letter of November 29th was read from the Secretary of the Marine Department of the Board of Trade stating that the Board propose to revise the scales of medicines and medical stores issued by them for merchant ships, and to entrust the revision to a committee consisting, as on the occasion of the last revision in 1888, of members of their medical staff and representatives of the Royal College of Surgeons, Royal College of Physicians, and Pharmaceutical Society of Great Britain, with the addition, this time, of a representative of the shipping interests concerned; and asking the Council to nominate a representative of the College to act on the committee.

Mr. Clinton Dent was appointed to represent the Royal College of Surgeons.

Fellowship Examination.

The following candidates have been approved at the examination indicated:

FINAL FELLOWSHIP.—T. G. Fenton, Krishna M. Pardhy, W. B. Ainger, E. E. Maples, G. E. O. Fenwick, G. W. Thomas, J. M. Wyatt, E. T. H. Davies, J. B. F. Wilson, C. W. G. Bryan, J. B. Macalpine, P. J. Verrall, A. Richardson, H. Blakeway, H. D. Gillies, E. L. M. Lobb, H. Chapple, M. Muthu Kumarasamy, J. F. O'Malley, E. Mapother, C. A. Pannett, R. N. Porter, B. Quick, P. B. Roth,

In all there were 67 candidates, of whom 26 were approved and 41 were referred. Messrs. E. M. Cowell and A. K. Dalal passed the examination, but cannot be admitted to the Fellowship until they have reached the requisite age of 25 years.

Medical News.

THE income of the Surgical Aid Society as reported at the annual meeting on December 6th was £28,380, which is an increase of over £1,800 on the income of the previous year, The number of surgical appliances issued was 40,401, an increase of nearly 1,200.

A COURSE of instruction in hospital administration for the diploma in public health will be given by Dr. J. MacCombie, medical superintendent of the North-Western Hospital, Hampstead, on Mondays at 3 p.m., and Thursdays at 11 a.m., beginning on January 9th, 1911. The fee is three guineas, and further particulars can be obtained from the Clerk of the Metropolitan Asylums Board, Embankment, E.C.

IT appears from the report of the council of the Metropolitan Hospital Sunday Fund for the year ending October 31st that the collections in various places of worship on Hospital Sunday amounted to £40,778. This is an increase of some £1,600 over the collection of the previous year. The largest collection was made at St. Paul's Cathedral—£4,483.

THE Friday evening meetings of the Royal Institution of Great Britain will be resumed on January 20th, when Sir James Dewar will give an address on Chemical Change at Low Temperatures. Among other lectures before Easter will be one on Grouse Disease by Mr. Arthur E. Shipley, on Digestive Activity by Professor H. E. Armstrong, and on Water Supply by Mr. J. H. Balfour-Browne, K.C.

IN the report of the libel action against Halifax doctors which was dismissed at the Leeds Assizes, published in the JOURNAL on page 1896 of last week's issue, we omitted to mention that the local solicitors, Messrs. Hirst and Whitley, Halifax, whose names were given, acted as agents for Messrs. Le Brasseur and Oakley, solicitors, of London, and that the latter firm represented the London and Counties Medical Protection Society, Limited, in this case.

Letters, Notes, and Answers.

☛ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

IGNORAMUS asks how to destroy "worm" which has attacked oak furniture.

A. M. asks for a manual on nursing such as would cover the syllabus of lectures prescribed by the Red Cross Society.

*** The following books would probably answer our correspondent's requirements: *Our Sick, and How to take Care of them*, by Miss Stacpoole. Cassell's Home Handbooks. 1s. *Nursing at Home*, by R. J. Collie and J. D. E. Mortimer. London: G. Gill and Sons. 1906. 8d. *Handbook for Untrained Nurses*. Published by the National Health Society, 53, Berners Street, W. 3d. *Hints and Help for Home Nursing and Hygiene*. Published by the St. John Ambulance Association. 1s.

HOME FOR TROUBLESOME BOY.

L. E. M. asks for advice in finding a school or institution for a troublesome and unruly boy who has got beyond the control of his widowed mother who has slender means.

*** It is difficult to recommend a school without knowing more of the boy's peculiarities. If morally defective the best plan would be to write to the Secretary, National Institutions for Persons Requiring Care and Control, 14, Howick Place, Westminster, S.W., who might be able to indicate a suitable institution.

CONSUMPTIVE SCHOOL CHILDREN.

A MEDICAL CORRESPONDENT, who has been appointed a member of a subcommittee of a county council to report as to the best means of dealing with cases of tuberculosis in children who have been forbidden to attend school, asks what is being done by other county councils, his own view being that the best solution would perhaps be to allow the children, who number some 80 to 100, to run wild. On the other hand, some members of the county council think that should the children recover, they will join the ranks of the unemployed.

*** The latest information as to what is being done by various county councils in dealing with cases of tuberculosis in school children may be obtained from the Annual Report for 1909 of the Chief Medical Officer of the Board of Education. (Open Air Schools, page 144. Schools for Consumptive Children, page 148.) It will be seen that, at present, very little is being done in this direction. The objections to allowing such children to "run wild" when excluded from school are: That they need medical supervision; that the home conditions are often unfavourable to recovery; that the disease tends to be of long duration, so that the children may miss their chance of education. Children excluded from school for tuberculosis at say 10 years of age sometimes never return to school at all, though they may be quite fit for school work under proper special conditions. The National Association for the Prevention of Consumption (20, Hanover Square, W.) published a pamphlet on tuberculosis in school children (Leaflet No. 6) which gives some suggestions as to the provision which may be desirable for such children.

FERTILITY OF WOMEN.

A. B. C. asks to be referred to statistics or literature bearing on the relative fertility of women at different ages.

*** See Matthews Duncan, On the Variations of the Fertility and Fecundity of Women according to Age, *Transactions of the Royal Society of Edinburgh*, vol. xxiii, p. 475; also the same author, On the Laws of the Fertility of Women, same *Transactions*, vol. xxiv, p. 287; and also in vol. xxiv, p. 481, a remarkable monograph by Professor Tait, entitled, Note on Formulae representing the Fecundity and Fertility of Women.

"STILL'S DISEASE."

DR. JOHN W. TAYLOR writes: In the review (JOURNAL, December 3rd) of Dr. Cautley's *Diseases of Children* the reviewer mentions: "On careful perusal we can find no subject of importance omitted;" and, further, it is stated "the most recent works on the subject are laid under contribution." Still's disease has been dealt with of late, but no notice of it whatever occurs in Dr. Cautley's work. It would be interesting to know if your reviewer has overlooked this omission, or whether Still's disease is not regarded by the profession generally as a distinct disease. For my part, I believe

Still's disease is regarded by some as a distinct disease. It would be interesting to know if Dr. Cautley and his reviewer are opposed to this view.

*** The reviewer had not overlooked the point. From the author's description of rheumatoid arthritis, however, it seemed clear that he is well acquainted with Still's work. There is a conflict of opinion as to whether the complaint often associated with Dr. Still's name is a separate and distinct one. Dr. Cautley is probably in agreement with many, if not a majority, of those with the requisite experience who do not regard it as a distinct disease. The reviewer's view is to the directly opposite effect; but such a difference of opinion was not considered to justify him in fixing upon the author the charge of an important omission. At the same time, it may be conceded that it might have been well if the author had referred to Still by name.

ANSWERS.

W. R. E.—Our correspondent might apply to the Secretary of the National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, W.C., who, we believe, has a list of suitable institutions for cases of hemiplegia, and might be willing to render assistance.

TREATMENT OF FLAT FOOT.

DR. FREDK. F. MIDDLEWEEK (Wallington) writes, in reply to "Bodmin's" query in the JOURNAL of November 26th: The exercises I make use of are: (1) Practise walking on tip-toes five or six times daily. (2) Practise walking on the heels with the feet dorsiflexed as much as possible. (3) Practise walking on the outer borders of the feet; the inner borders should be well raised from the ground and the feet kept parallel with each other. (4) Practise extension, inversion, flexion, and eversion of the feet, first as a passive exercise by the aid of the surgeon making the movements to the utmost limit, then as an active one. (5) Practise standing with the toes in and heels out; now raise on the toes and press out the heels as much as possible. (6) Practise standing with the feet parallel and about 8 in. apart; now raise the inner side of the feet, throwing the weight on the outer sides. In addition to movements massage should be given, especially deep friction on the painful spots, which are usually found over the calcaneo-navicular ligament, the anterior end of the os calcis, and short plantar ligament. The tibialis anticus is usually found to be hypertrophied; this should also receive massage treatment. Messrs. A. Winkler and Co., 5, Charterhouse Buildings, Aldersgate, E.C., supply a good instep support. It would be interesting to know if "Bodmin's" patient has scoliosis.

LETTERS, NOTES, ETC.

A MEDICAL CORRESPONDENT sends us a circular which has been received by a matron and a sister-in-charge of a lying-in home. It is got up to resemble typewriting, but would seem to be produced either by printing or some other process. The first paragraph of the circular suggests that the recipient is "doubtless occasionally asked for advice and information by women whom circumstances have rendered unfit for child-bearing; for instance, women who have contracted some constitutional or local disease which makes the avoidance of pregnancy a necessity." The remainder of the circular is in commendation of certain quinine pessaries sold by the company issuing the circular. The ladies who have received this circular are naturally indignant, and feel that they are insulted by receiving such a request as is contained in the circular. Every medical man will, we feel sure, sympathize with them, but the only remedy would appear to be to put all such communications in the waste-paper basket.

LICENCE DUTY ON MOTOR CARS.

THE question whether medical men who use motor cars in their practice are entitled to use them for their own convenience and pleasure, notwithstanding that they claim exemption from half the rate of motor taxation, has, we learn from the *Autocar*, led to the Motor Union addressing a letter on the subject to the Treasury, and the following is the text of the reply received:

Treasury Chambers,
November 18th, 1910.

Sir,—In reply to your letter of the 10th inst., I am directed by the Lords Commissioners of His Majesty's Treasury to state that in accordance with Section 86 (4) of the Finance (1909–10) Act, 1910, it is for the County Council to satisfy itself on the question of fact whether a motor car, in respect of which a medical practitioner claims relief of half the rate of duty payable, is kept for the purpose of his profession. Provided that the Council is satisfied on this question, My Lords are of opinion that the medical practitioner is entitled to the allowance, although he may at times use the car for other purposes.

I am, sir, your obedient servant,
(Signed) J. H. MURRAY.

The Assistant Secretary,
The Motor Union,
Caxton House, S.W.

A FILTERING TOBACCO PIPE.

MESSRS. FOSTER-JOSEPHS (1, Clement's Inn, Strand) have brought out a pipe with two bowls, one in front of the other. In the front bowl the tobacco is burned, and in the back bowl the smoke is filtered through cotton wool. The smoke necessarily passes through the cotton wool, because, emerging from the first bowl through the bottom of the second bowl, it enters the pipe stem through an aperture high up in the second bowl. The pipe would certainly prevent the passage of half-burned particles of carbon and the liquid matters which cause bubbling in ordinary pipes, and sometimes get into the smoker's mouth. The smoke, too, is cooled down. Its advantage over other special pipes which have the same object in view is that, the smoke-filtering material being packed quite loosely, it offers no obstruction.

A SAFETY RAZOR.

WE are asked to express an opinion upon the Gillette safety razor, an advertisement of which appears elsewhere in the JOURNAL. After a considerable experience we can say without hesitation that it is an excellent razor; it is simple to use, well made, and portable. It is put up in several different ways, but our experience has been with the standard pattern, which costs 1 guinea. The pocket edition, which we have not seen, is sold at the same price, but is said to take up no more room than a cigarette case.

THE POLYCLINIC.

DRS. JAS. WHITTON (Oamaru, New Zealand) and J. A. NEWELL (Lyttelton, New Zealand) write: We have just finished six months' post-graduate work in London, and have completed the courses at the Polyclinic in Chenies Street. We should like to make known through your paper, for the benefit of Colonial men coming to London, the high value of the classes there and the helpfulness and kindnesses of the teachers one and all. Everything in their power is done to assist students, both with lectures and clinical work.

SICK ROOM FIRES.

DR. GRIFFITH C. WILKIN (Paignton) writes in praise of coalite, which he has tested in his sitting-room for some time past. The material, he says, quickly becomes incandescent, giving off much heat, but no smoke; the fire does not require poking, and the ash is very small.

IS ECZEMA ON THE INCREASE?

MAJOR FINK, I.M.S. (ret.), London, W.) writes: Dr. J. C. McWalter, in the JOURNAL of October 15th, p. 1195, asks the question, "Is eczema on the increase?" and suggests a plan current in Buenos Aires, he tells us, for verifying the figures in the British Isles, which may run from 3,000 to 300,000. My opinion is that the term "eczema" is loosely applied to all manner of skin eruptions at the present day by a certain class of the public, who try to treat themselves with eczema nostrums over a patch of psoriasis, lichen, acne, or anything, and when the remedy fails it is still eczema of a bad form which has turned chronic. Even contagious impetigo, which is so effectually and simply cured with an ointment of hydrargyri ammon. dil., is converted into eczema. It is possible for anything, therefore, to be converted into this disease, which is said to be on the increase. It is therefore not always the doctor's fault if the patient likes to use a term so easily pronounced and so widely advertised. I once had a patient with varicose ulcer of the calf with intense pruritus and oedema around, which I proceeded to treat, but he would insist that he had an eczema for which he had used "a lotion with a sediment at the bottom of it," and all he wanted was an ointment to apply when he got home. Every effort was employed to convince him that varicose veins were present in his calf which required careful treatment; but he knew best, and would have an eczema ointment. It is well known to every medical man that thoroughness and persistence of treatment are essential for the cure of any obstinate skin disease. We are told by one authority recently that "A great many failures are no doubt due to the fact that the parents and nurses do not carry out instructions properly." I am also of opinion that a great many patients prefer to diagnose their complaints, and try nostrums which often create eczema and mask the original skin eruption, which may be the simplest form of disease to cure by the proper diagnostician being seen in time.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL.

	£	s.	d.
Eight lines and under	0	4	0
Each additional line	0	0	6
A whole column	2	13	4
A page	8	0	0

An average line contains six words.

All remittances by Post Office Orders must be made payable to the British Medical Association at the General Post Office, London. No responsibility will be accepted for any such remittance not so safeguarded.

Advertisements should be delivered, addressed to the Manager, 429, Strand, London, not later than the first post on Wednesday morning preceding publication, and, if not paid for at the time, should be accompanied by a reference.

NOTE.—It is against the rules of the Post Office to receive *postes Restante* letters addressed either in initials or numbers.